



## Four new species of *Phoenicagrion* von Ellenrieder, 2008 from Brazil (Odonata, Coenagrionidae)

ANGELO B.M. MACHADO

Departamento de Zoologia, Universidade Federal de Minas Gerais, Caixa Postal 486, 31270-901, Belo Horizonte, Minas Gerais, Brazil. E-mail: angelo@icb.ufmg.br

### Abstract

Four new species of *Phoenicagrion* von Ellenrieder, 2008, *P.flavescens*, *P. ibseni*, *P. karaja*, and *P. megalobos* are described and illustrated. A key is provided for the six species of the genus.

**Key words:** Odonata, Coenagrionidae, *Phoenicagrion*, Taxonomy, Brazil

### Resumo

Quatro novas espécies de *Phoenicagrion* von Ellenrieder, 2008, *P.flavescens*, *P. ibseni*, *P. karaja* e *P.megalobos* são descritas e ilustradas. Apresenta-se uma chave para as seis espécies do gênero.

### Introduction

The recent description of the genus *Phoenicagrion* by von Ellenrieder (2008) put an end in the controversies and doubts about the generic status of *Leptagrion flammeum* Selys 1876. Williamson (1917) placed this species with doubts in his newly erected genus *Aeolagrion*. Dunkle (1991) redefined *Aeolagrion*, excluded *L. flammeum* from it and left this species in an undefined position as "*Aeolagrion*," a view also held by De Marmels (1989). Heckman (2008), following previous literature, maintained *L. flammeum* in *Aeolagrion*. After a detailed morphological comparison of *Aeolagrion flammeum* with the type species of *Aeolagrion*, *Agrion dorsale* Burmeister 1839, and with all described genera of New World Coenagrionidae, von Ellenrieder (2008) created the genus *Phoenicagrion* for it and an undescribed species. I describe herein four new species of *Phoenicagrion* from Brazil, thus considerably increasing the diversity and geographic distribution of this genus.

### Material and methods

Specimens examined are listed under species accounts. In addition specimens of *P. flammeum* (Selys 1876) from the following localities were examined: Brazil, Acre State, Cruzeiro do Sul (7° 38'S, 72° 36'W); Amapá State, Mazagão, Serra do Navio (0° 59'S, 52° 3'W); Amazonas State, Taraquá, Tefé (3° 27' 15"S, 62° 51' 5"W); Mato Grosso do Sul, Rio Xingú, Juruna Indian Village (about 57° 03'S, 14° 05'W); Pará State, Belém (1° 27'S, 48° 29'W), Cachoeira Porteira (1° 5'S, 57° 4'W); Paraíba State, Areia (6° 58'S, 35° 42'W); Rondônia State, Guajará Mirim (10° 21'S, 65° 19'W). Diagnostic characters were illustrated with aid of a camera lucida and drawings are not to scale. Measurements are in mm, abdominal length includes appendages. Terminology for wing venation follows Tillyard & Fraser (1938) and for penis Kennedy (1916). Abbreviations used are as