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## Description of two new species of *Pheles* Herrich–Schäffer, [1853] and notes on the taxonomic position of two species hitherto included in the genus (Riodinidae: Riodiniinae)

FERNANDO MAIA SILVA DIAS<sup>1,2</sup>, DIEGO RODRIGO DOLIBAINA<sup>1</sup>,  
CARLOS GUILHERME COSTA MIELKE<sup>1</sup>, OLAF HERMANN HENDRIK MIELKE<sup>1</sup>  
& MIRNA MARTINS CASAGRANDE<sup>1</sup>

<sup>1</sup>Laboratório de Estudos de Lepidoptera Neotropical, Departamento de Zoologia, Universidade Federal do Paraná, P.O. Box 19.020, 81.531–980 Curitiba, Paraná, Brazil. E-mail: fernandomsdias@yahoo.com.br, dirodrido@hotmail.com, cmielke1@uol.com.br, omhesp@ufpr.br, mibras@ufpr.br

<sup>2</sup>Corresponding author

### Abstract

Two new species of *Pheles* Herrich–Schäffer, [1853], *Pheles plaumanni* Dolibaina & Dias **sp. nov.** and *Pheles obscura* C. Mielke, Dolibaina & Dias **sp. nov.** are described from southern Brazil. Through the comparative study of the morphology of the head, labial palpus and the genitalia two species are removed from *Pheles* and the following new combinations are proposed: *Pachythone bicolor* (Godman & Salvin, 1886) **comb. nov.** and *Melanis caatingensis* (Callaghan & Nobre, 2014) **comb. nov.** The species studied are pictured and details of the head and genitalia are illustrated.

**Key words:** frons, incertae sedis, labial palpus, morphology, *Melanis*, *Pachythone*

### Introduction

*Pheles* Herrich–Schäffer, [1853] is a Neotropical genus of the four forewing radial veined (FRV) riodinid butterflies, with 11 valid taxa (Callaghan & Lamas 2004). The genus is included in Riodiniinae by the presence of a modified fultura inferior (“pedicel”; “fibula” *sensu* Stichel 1911) in the male genitalia, and in Riodinini by the presence of a deep indentation on the anterior margin of the tegumen (Harvey 1987). *Pheles*, as many genera in the family, is poorly defined. In fact, the majority of the characters used to define *Pheles* were presented by Stichel (1911) to describe the genus *Lepricornis* Blanchard, 1840, currently viewed as a junior subjective synonym of *Pheles*. The distinction between these two genera chiefly concerns the wing venation, which is somewhat modified in *P. heliconides* Herrich–Schäffer, [1853] (Stichel 1911: pl. 9 fig. 35b), the only species included in *Pheles* by Stichel (1911, 1931) and type species of the genus.

Species of *Pheles* are either dark brown, with bluish lines radiating from the base of the wings between the veins, and with an oblique creamy white subapical band; or mostly translucent, dark brown at the wings margins and over the veins, and with an oblique creamy white or translucent subapical band; there are orange patches on the base of the wings and/or on the subapical band in some taxa. The only exception is *Lepricornis bicolor* Godman & Salvin, 1886, which exhibits a wing pattern similar to species of *Chamaelimnas* C. Felder & R. Felder, 1865. The two predominant kinds of wing patterns of species of *Pheles* are associated with mimetic rings which involve several other species of unrelated Riodinidae and day-flying moths, as commented elsewhere, causing much taxonomic instability (Dias *et al.* 2013). Nevertheless, species of *Pheles* can be distinguished from species of superficially similar Riodinini genera by the antennae, usually densely covered with long scales, by the orange scaling on the post gena, labial palpus, prothorax, and on the tip of the abdomen surrounding the genitalia (D’Abrera 1994; DeVries 1997). Additionally, the second segment of the labial palpus is strong and long, at least twice the size of the first; the third segment is very short and rounded, one tenth the size of the second; the valva is