A new species of Euptychia Hübner, 1818 (Lepidoptera: Nymphalidae: Satyrinae: Satyrini) from Mount Roraima, Guyana

SHINICHI NAKAHARA1,4, STEVEN A. FRATELLO2 & DONALD J. HARVEY3

1McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, University of Florida, Gainesville, FL 32611, USA. E-mail: snakahara@ufl.edu
211 First St, W. Islip, NY 11795, USA. E-mail: sfratell@suffolk.lib.ny.us
3Department of Entomology, Smithsonian Institution, Washington, D.C. 20560-0127, USA. E-mail: harveyd@si.edu
4Corresponding author

Abstract

A new nymphalid species in the subtribe Euptychiina, Euptychia roraima Nakahara, Fratello & Harvey n. sp., is described from Mount Roraima, Guyana. Both internal and external morphology of E. roraima are compared against several Euptychia species and the relationship between E. roraima and congeners is briefly discussed. A strong case is put forth for further and extensive exploration of the Pantepui region concerning its poorly known butterfly fauna.

Key words: Euptychiina, genitalia, Guianas, Neotropical, Pantepui, Satyrinae

Introduction

The Pantepui is a large region of mountainous tablelands located predominantly in southeastern Venezuela, but also extending into northwestern Guyana and northern Brazil (Braun et al. 2003). Mayr & Phelps (1955) first used this term ‘Pantepui’ and subsequently defined the region as “the sandstone tabletop mountains in the Venezuelan Territorio Amazonas and Estado Bolivar and in the adjacent border regions of Brazil and Guyana” (Mayr & Phelps 1967), their research pertaining to the region’s avifauna. The actual area defined by the term ‘Pantepui’ varies by authors (e.g. Müller 1973; Steyermark 1982) in respect to faunistic, floristic and topographic features. Despite these variable definitions, it is widely accepted that the Pantepui represents a biogeographical region that harbors numerous endemic taxa and is one of the least explored and known areas on earth. As proposed by Neil (1996, 2008), the Pantepui is plausibly considered to form a biogeographic region for butterflies, which is supported by the discoveries of endemic butterfly taxa (e.g. Sialachis halloweendi Hall, 2006 (Riodinidae); Emesis agata Pyrcz, 2005 (Nymphalidae); Forsterinaria hannieri Zubek & Pyrcz, 2011 (Nymphalidae)) inhabiting the cloud forest and scrub of the tepuis’ slopes and plateaus. It is important to note that there will be a series of publications regarding the butterfly fauna of this region, the first two parts very recently published (Costa et al. 2014a, 2014b).

Mount Roraima (2810m) is situated in the Pantepui region, at the juncture of Venezuela, Guyana and Brazil. It is one of the table mountains called ‘tepuis’ composed of sandstone layers, which are the remnants of an ancient erosional earth process (Berry et al. 1995; Braun et al. 2003). A large section of the Guyana Pantepui (the easternmost section of the Pantepui) are known as the Pacaraima (or Pakaraima) Mountains, and Mt. Roraima represents the tallest peak of this range (Braun et al. 2003) and one of the loftiest tepuis, only surpassed by Brazil’s Pico da Neblina (2994m) and its satellite peak. Compared to the remoteness of most of these tepuis, Mt. Roraima is moderately easy to access on the Venezuelan side, and it is the first tepui to have been explored (McDiarmid & Donnelly 2005). Subsequent to this first expedition, many discoveries of Pantepui endemic taxa have been made during the numerous scientific expeditions to Mt. Roraima.

The purpose of this paper is to describe and name a new species of Euptychia from the Pantepui, Euptychia being a speciose genus in the subtribe Euptychiina, a poorly known clade of Satyrinae (Nymphalidae) (Marin et al.
Pantepui and Andean Euptychia species; this additional information added context to the one known specimen of E. roraima and accounted for a better article. We are grateful to Andrew Neild for reading and making comment on our manuscript. Karie Darrow (USNM, USA) took the excellent genitalia photos. The first author acknowledges support from the National Science Foundation, Grant No. DEB-1256742. The second author thanks the following people for the specimen of E. roraima and other butterflies collected on the Smithsonian Mt. Roraima ornithology expedition: expedition leader Dr. Mike Braun (USNM, USA) allowed butterfly collecting on this Smithsonian Division of Birds expedition; Museum Specialist Chris Milensky (USNM, USA), and predominantly University of Guyana student Wiltshire Hinds (Guyana) and Guyanese national expedition guide/worker Romeo Williams (Guyana) undertook the collecting effort; Chris Milensky assiduously made sure specimens and data were brought back to the Smithsonian Lepidoptera collection. Chris Milensky also generously allowed his photos of Mt. Roraima to be used on this and the second author’s previous article. Finally, we thank Rayner Núñez Agulia (Cuba) and an anonymous reviewer for their helpful comments on the manuscript.

**Literature cited**


http://dx.doi.org/10.1007/s13744-012-0073-5


http://dx.doi.org/10.1590/S1519-566X2011000100001


Satyrinae: Satyrini) from the Amazon basin and the Guianas. Tropical Lepidoptera Research, 24 (1), 4–9.