

# ASSOCIATION FOR TROPICAL LEPIDOPTERA

# NOTES

P.O.Box 141210  
Gainesville, FL 32614, USA  
Editor: Andrei Sourakov  
Assoc. Editor: Thomas C. Emmel

June 2013

## ANNOTATED NEW RECORDS FOR NYMPHALID SPECIES FROM THE SIERRA DE IMATACA, VENEZUELA (LEPIDOPTERA: NYMPHALIDAE)

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### INTRODUCTION

The primary source of information regarding the nymphalid fauna of Venezuela is in the ongoing book series by Neild (1996; 2008), of which the first two volumes alone cover some 470 species. However, due to the high diversity of nymphalid butterflies seen in the Neotropical region, new discoveries in the groups already published are to be expected from this butterfly-rich nation. Many areas of eastern Venezuela in particular remain virgin territory for lepidopterists (Neild, 1996) and sampling and collecting are sporadic in these areas. Given this fact, the first author is working to fully document the butterfly fauna of these poorly known regions. Prior to this final inventory, we here report four species of Nymphalidae (*Hypna rufescens*, *Memphis glaucone*, *Agrias narcissus stoffeli* and *Morpho hecuba hecuba*) as new records for the Sierra de Imatoca and/or the eastern lowland forests of Venezuela. These records are to supplement these works by Neild (1996; 2008), and to alert the reader to areas that merit further attention from lepidopterists. Most of the specimens examined resulted from survey trips to Río Grande Forestry Reserve (Fig. 2) conducted in March and September 2011 by Shinichi Nakahara and Alan Highton.

The following acronyms are used throughout the paper:  
**ELF:** Eastern lowland forests

**MIZA:** Museo del Instituto de Zoología Agrícola, Maracay, Venezuela

**RGFR:** Río Grande Forestry Reserve, Bolivar state, Venezuela

### NEW RECORDS

*Hypna rufescens* (Cramer, 1777) (Fig. 1) (Charaxinae)

One female specimen of *H. rufescens* was collected on bait of fermenting fruit during the survey trip in March 2011 (this bait consisted of rotting bananas and guavas mixed with local alcoholic beverages, put in a nylon mesh net and hung from branches using nylon thread). This record of *H. rufescens*



Fig. 1. *Hypna rufescens*, female dorsal (above) and ventral



Fig. 2. Map of eastern Venezuela. Red circle indicates our study area, the Río Grande forestry reserve (RGFR). © Andrew Neild: *The Butterflies of Venezuela, Part 2*

represents the first record for the ELF and also for Guianan moist forests. It is also the easternmost record for this species. According to the available published distributional records (e.g. Neild, 1996), this species inhabits the mountainous districts of northern Colombia and northern and western Venezuela. However, since publication of that work, a couple of specimens have also been recorded (previously unpublished) from the lower Caura river in central Bolívar state by BJ, in the same biogeographical region as the RGFR. Interestingly, in the RGFR this species was found to be micro-sympatric with its widespread congener *H. clytemnestra* (Cramer, 1777) for the first time south of the Orinoco river. Although some treat these two species as conspecific (e.g. Comstock, 1961), the extensive records of sympatry in many areas of Venezuela clearly indicate that these are distinct species as classified by Neild (1996). Although we recorded only one specimen of *H. rufescens*, *H. clytemnestra* was common in both March and September 2011, and was easily attracted to bait. This record also indicates that *H. rufescens* is possibly a resident in Guyana, whose border lies barely a hundred kilometres to the east.

**Specimens examined:** Bolívar state, VENEZUELA: Las Trincheras: 1♂, 23 June 1995, 1♂ (Fig. 1) 7 July 1999, 1♀ 10 July 1999, 1♀ 23 July 1998 (all B. Jost); **Campamento Río Grande:** 1♀ 15-18 March 2011 (S. Nakahara).

### *Memphis glaucone glaucone* (C. & R. Felder, 1862) (Fig. 3) (Charaxinae)

One male was recorded in March, and one female in September, 2011. Both of these specimens were attracted to bait. A previous record of this species in the Sierra de Imataca was based on female adults and several larvae (Andres Orellana, unpublished data), representing the first records for the Sierra de Imataca and, moreover, the ELF (Neild, 1996, reports the species from further south in the Pantepui region, and also from Amazonas state to the south-west). This species can easily be misidentified as *Memphis glauce* (a species reported from Venezuela in an unpublished list compiled by Andres Orellana) in collections due to their phenotypical similarity, thus leading to confusion and presumably the lack of records from this area.

**Specimens examined:** Bolívar state, VENEZUELA: 1♂ Campamento Río Grande, 15-18 March 2011, 1♀ (Fig. 3) 1-5 September 2011 (S. Nakahara).

### *Agrias narcissus stoffeli* Mast de Maeght & Descimon, 1972 (Fig. 4) (Charaxinae)

An examination of the original description of this subspecies (Maeght and Descimon, 1972) revealed that the true capture site of *A. n. stoffeli* was somewhere near the base of the Sierra de Lema (the type locality given as “El Dorado” is a generalized collecting locality). According to Neild (1996), this species was known only from further south in the Pantepui region, on whose northeastern border the type locality lies. Although





Fig. 3. *Memphis glaucone*, female dorsal (above) and ventral



Fig. 4. *Agrias narcissus stoffeli*, male dorsal (above) and ventral

not published, this species had been recorded from several localities within the ELF before our survey trips (pers. comm. from sources who wish to remain anonymous). We here report these records as the first published for this biogeographical area. Individuals were seen during both trips and all the specimens were collected on bait. Both sexes came to bait after continuous sunshine for several hours. Most of the unpublished records are from the drier months of the year. These vary from year to year; generally December to April, but when the rains are late, records may extend into June. However, the species has also occasionally been found in other months of the year. Whether this is due to especially dry conditions in that year is not known. This subspecies should be found in suitable habitat throughout the continuous tract of forest which extends eastwards into Guyana. It would be most interesting to locate and investigate the transition zone between *stoffeli* and the nominate race.

**Specimens examined:** Bolívar state, VENEZUELA: Río

**Grande:** alt. 200m, 1♂ (Fig. 4), 15-18 March 2011, and 2♀ 1-5 September 2011 (S.Nakahara). All the following data are supplied by Andrew Neild (pers. comm.) sourced from various Venezuelan collections (some collectors wish to remain anonymous): Bolívar state, VENEZUELA: **Río Grande** alt. 200m, April 1992, April 1999 (anonymous collectors); **El Dorado – Santa Elena road:** Km 50, January 2000 (anonymous collectors); Km 85, December 1983 & December 1984 (anonymous collectors); Km 88, south of El Dorado, alt. 200m: December 1994, January 2000, March 2009, September 2010 (anonymous collectors); Km 82, February 1966 (Col. Gadou); Km 85, January 1967 (Col. Gadou); Km 94, June 1978 (Col. Gadou); Km 107, alt. 520m, August 1957 (MIZA); **Meseta de Nuria:** El Hormiguero, alt. 500m, December 1974 (MIZA).

***Morpho hecuba hecuba* (Linnaeus, 1771)** (Fig. 5) (Morphinae)  
We decided to include this sight record because of its





Fig. 5. *Morpho hecuba hecuba* (photo by Alan Highton)

interesting association with climate classification and also because according to Blandin (2007), this record is a significant northern range extension for *M. hecuba*. This species has never been recorded from the Sierra de Imataca nor indeed from anywhere further north than El Dorado (Neild, 2008), and was never seen during our survey trip to the RGFR. However, AH encountered this species flying quite commonly when he visited this reserve in November 2011. It is hard to imagine that such a large species escaped detection during our survey trips and those of many other collectors to the same region before us (Neild, pers. comm.). The lack of records may be due to its seasonal emergence corresponding to the wet season, and its absence or extreme paucity in the dry season, as mentioned in Neild (2008) and experienced by AH. It is probable that March and September, our survey months, both belong to dry seasons in the RGFR and this explains why butterfly numbers were relatively low during our survey trip, and *Morpho hecuba* was absent. Certainly this climate classification for the Guianan region is supported by Teunissen *et al.* (2001) (rainy season: early December to the end of January, and early May to mid August; dry season: early February to the end of April, and mid August to the end of November). On the other hand, many highly experienced Venezuelan collectors have visited the reserve numerous times in both dry and wet seasons and failed to see the species, suggesting that it is genuinely rare and probably also much more localised than normal at this locality, a theory made plausible by the fact that it has never been recorded further north than this latitude anywhere in its range. It is possible that *M. hecuba* might have had an unusually successful season, contributing to higher numbers than usual, but this is pure conjecture.

**Specimens examined:** Campamento Río Grande, Bolívar state, VENEZUELA: several specimens observed (Fig. 5), November 2011 (A. Highton).

## ACKNOWLEDGEMENTS

We are very grateful to Andrew Neild (UK) for his help all through the course of preparing this manuscript. We are also grateful to Juan Campos (Venezuela) for his kind hospitality which enabled us to more easily carry out our fieldwork. Thanks are also due to two Venezuelan collectors who wish to remain anonymous, for their kind help with data.

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