# DESCRIPTION OF NEW SPECIES AND NEW RECORDS OF RIODINIDS (LEPIDOPTERA, RIODINIDAE) FROM COLOMBIA<sup>\*</sup>

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#### Abstract

In the present study, seven new species of Riodinidae from Colombia are described based on material deposited in the authors' collections and by comparative analysis of literature and revision of other collections in Colombia: *Colaciticus seitzi* n. sp., *Lucillella aphrodita* n. sp., *Euselasia tenebrosa* n. sp., *Machaya aenigmatica* n. sp., *Esthemopsis chocoana* n. sp., *Adelotypa andresi* n. sp., and *Symmachia titiana occidentalis* n. ssp. New records of thirteen species belonging to the genera *Esthemopsis, Themone, Napaea, Cyrenia, Menander, Euselasia, Symmachia, Ithomeis, Nahida, Pachytone* and *Panaropsis*, are also presented and comments on the taxonomic status of each species are provided.

Key words: Colombia, Ecuador, mimicry, Rhopalocera, Riodinidae, new taxa, new records.

# DESCRIPCIÓN DE NUEVAS ESPECIES Y NUEVOS REGISTROS DE RIODINIDOS (LEPIDOPTERA: RIODINIDAE) PARA COLOMBIA

#### Resumen

En el presente trabajo se describen siete nuevas especies de Riodinidae para Colombia basados en material depositado en la colección de los autores y por análisis comparativo al revisar otras colecciones colombianas: *Colaciticus seitzi* sp. n., *Lucillella aphrodita* sp. n., *Euselasia tenebrosa* sp. n., *Machaya aenigmatica* sp. n., *Esthemopsis chocoana* sp. n., *Adelotypa andresi* sp. n., y *Symmachia titiana occidentalis* ssp. n. Se presentan nuevos registros de trece especies descritas previamente pertenecientes a los géneros *Esthemopsis, Themone, Napaea, Cyrenia, Menander, Euselasia, Symmachia, Ithomeis, Nahida, Pachytone* y *Panaropsis* y se suministran comentarios taxonómicos de cada una.

**Palabras clave:** Colombia, Ecuador, mimetismo, Rhopalocera, Riodinidae, nuevos taxa, nuevos registros.

#### **INTRODUCTION**

Colombia is one of the richest Neotropical countries in species of Riodinidae (CALLAGHAN, 1985), and proof is the constant discovery of new species in our diverse ecosystems, particularly from the tropical humid forest. Other species already described, today are very rare and known only from one or two specimens

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deposited in natural history museums or other institutions (THIEME, 1907; SEITZ, 1924; BROWN, 1993; D´ABRERA, 1994; JAUFFRET & JAUFFRET, 2009). The purpose of this paper is to describe some of the new species collected over the past 25 years and disclose the presence of rare species from Colombia through new records.

## **METHODS**

The specimens of the genera and species dealt with here are deposited in the collections of the authors. Exceptions are *Themone pulcherrima* (Herrich-Schäffer, 1853), located in the entomological collection of the University of Nariño (Pasto) and *Menander aldasi* (Hall & Willmott, 1995) deposited in the collection of the Alexander von Humboldt Research Institute (Villa de Leyva, Boyacá). Extended specimens are described using the morphological character terminology of adults following SALAZAR & CONSTANTINO (2007). The character terminology of the wings and genitalia is adapted from BEUTELSPACHER (1975) and DE VRIES (1997). Literature is cited in the text and in the reference section.

Specimens were examined from the following public and private collections and the collections acronyms used throughout the text are listed below:

**IiAvH:** Instituto de investigaciones Alexander von Humboldt, Villa de Leyva (courtesy Edwin Daniel Torres auxiliar de colecciones biológicas).

**MHN-UC:** Museo de Historia Natural-Universidad de Caldas, Julián Salazar, Manizales (CJS), Caldas.

CGR: Germán Ramírez collection, Mitú, Vaupés.

**CFC:** Constantino Family collection, Cali, Valle.

CJIV: José I. Vargas collection, Villamaría, Caldas.

**CUN:** Biology Department, Universidad de Nariño collection, Pasto, Nariño (material recorded by Ana Milena Mora).

FW: Forewing. HW: Hindwing.

## RESULTS

#### **New Species**

### Genus Colaciticus Stichel, 1910

The genus *Colaciticus* was created by H. Stichel in 1910 to include 2 or 3 species of Riodinidae singular for imitating several species of diurnal moths with their yellow coloration. One of this species, *C. jordani* Seitz 1917, described from Brazil is considered by CALLAGHAN & LAMAS (2004) a synonym for an infrasubspecific form of *C. johnstoni*, Damatt 1904, the type species of the genus. However the color pattern of both entities is different, therefore *C. jordani* should be considered as good species (*status rest*.). We have an example close to *jordani*, from the Magdalena River far removed from the Brazil region and is consequently denominated:

#### 1.- Colaciticus seitzi Salazar, Constantino & Rodríguez, n. sp. (Plate II, Fig. 10, 11)

**Holotype:** male, COLOMBIA, **TOLIMA:** Fresno-La Parroquia (oil field), at 800 m, VIII-1999, José I. Vargas *leg*. Deposited in the collection **MHN-UC**, Julián A. Salazar (**CJS**), Manizales, Colombia.

#### Diagnosis

Male (Figs. 10-11): forewing length 18 mm. DFW black interrupted by two characteristic yellow spots. The first small and isolated, circumscribed in the basal submedial area and separated from the other even smaller oval spot by a black oblique stripe which limits it to the upper medial area. Apical and marginal area wide and black as in *C. jordani*. HW with the same pattern and color. Underside with a notable yellow spot that extends from the costal margin to the postmedial area, but unlike *jordani*, it terminates in the upper post basal area, while in *jordani* it ends in the basal region. This spot on the new species presents a more concave entry at the lower edge, while *jordani* is well rounded. The VHW has the same coloration and position of the spots. This new species also differs from *C. jordani* by the absence of the silver premarginal line present on the HW of this last species. Head with elongated palps typical for the genus, thorax and abdomen dark brown except for the latter with a yellow spot located on each side. Short antennae but with elongated antenal club culminating in a point.

#### Female unknown.

**Male genitalia** (Fig. 55-56) as illustrated. Atypical, Uncus broad and slightly curved distally; Tegumen twice as large as the Uncus, with margins curved distally and basally; two falces curved dorsally at an angle of 45°, tapering to pointed tip; Vinculum very narrow and long, slightly curved distally; Valvae very narrow and long, slightly curved distally; Valvae very narrow and long, slightly curved basally with a peculiar tip armed with a round ball with rows of microspines; Aedeagus long and curved basally with a pointed tip. Everted vesica bulbous at base with two flat process of the same size aligned laterally to the Aedeagus.

**Etymology:** the species name alludes to the famous German lepidopterist Adalbert Seitz (1869-1938) who contributed significantly to the study of the Neotropical Riodinidae and described in 1917 two of the four known species of *Colaciticus*, *C. jordani* and *C. banghaasi*.

**Discussion:** SEITZ (1917: 672) noted that the species of *Colaciticus* mimic moths of the genus *Cyllopoda* Dalman, 1823. Indeed, this new species along with *Colaciticus jordani* faithfully imitates the wing spots and coloration of *Cyllopoda latiflava* Warren, 1905 of Colombia and *Cyllopoda expansifascia* Prout, 1917 of Bolivia. Both *Colaciticus banghaasi* mimics *Cyllopoda radiata* Warren, 1906 in Brazil and *Colaciticus johnstoni* mimics *Cyllopoda osirisprotmeta* Prout, 1938 in Peru and Ecuador (LEWIS & COVELL, 2008). Likewise, certain other Riodinids resemble *Colaciticus* and *Cyllopoda* in wing pattern, such as the female of *Setabis myrtis* Wetswood, 1851 and diverse species of the genus *Chamaelimnas* Felder, 1863. No more individuals of *C. seitzi* were subsequently seen despite numerous returns to the type locality.

### Genus Lucillella Strand, 1932

A unique Andean genus described in 1932, consisting of six species: Lucillella camissa (Hewitson, 1870) from E. Ecuador and S.E. Colombia, L. asterra (Grose-Smith. 1989) from the Central Cordillera. Antioquia. Colombia. *L. suberra* (Hewitson, 1877) from E. Ecuador, *L. pomposa* (Stichel, 1910) from S.E. Peru, *L. splendida* Hall & Harvey, 2007 from the Eastern Cordillera, Boyacá, Colombia, and L. arcoirisa Hall & Willmott, 2010 from S. Ecuador, but in this paper a new species from W. Colombia is described, raising the total to seven known species, being Colombia the richest country with four species. *L. asterra* was described from our country (GROSE-SMITH, 1898: 72) and the holotype figured shortly afterwards without apparently mentioning any specific locality capture data (GROSE-SMITH, 1902: Pl. I). In recent times D`ABRERA (1994: 1025) provided a full color photo of the type with capture data as the locality of Valdivia, located in Antioquia, central mountain range. We have specimens of the same mountain range from the localities of Amagá, Amalfi, Envigado and Rionegro, Antioquia which coincide in all respects with this species morphotype. However, recently we found other specimens from the Western Cordillera, west slope, which differ significantly in the form of the scarlet red FW spot and by the extension of the silver-white spot on the HW, here much more extensive and manifest. From these differences we recognize as a new species:

2.- Lucillella aphrodita Rodríguez, Salazar & Constantino, n. sp. (Plate I, Figs. 1, 2, 3)

**Holotype:** male, COLOMBIA, **RISARALDA:** San Antonio del Chamí-quebrada Sutú, 1800 m, 6-I-1986, Julián Salazar *leg.* Deposited in the collection of the Natural History Museum, Caldas University (**MHN-UC** 318).

**Allotype:** female, COLOMBIA, **RISARALDA:** San Antonio del Chamí-quebrada Sutú, 1800 m, 6-I-1986, Julián Salazar *leg.* (CJS).

**Paratypes:** male, COLOMBIA, **RISARALDA:** San Antonio del Chamí-quebrada Sutú, 1800 m, 6-I-1986, Julián Salazar *leg.* (**CJS**). Male, **RISARALDA:** Puerto de Oro, at 1700 m, X-1993, Germán Ramírez *leg.* (**CGR**-99).

### Diagnosis

Male (Figs. 1-3): forewing length 18 mm. DFW black with a dark blue reflectance, except for a scarlet red spot located in the inferior part of the discal cell and medial area that is rectangular and shorter than in *L. asterra* (elongated and thin in this species) and reaches the Cu2. The reverse is opaque and dull with the red spot translucent while *asterra* turns orange. There is also a series of 5-6 transverse grey rays which begin in the medial area and end close to the margin. DHW black with dark blue reflections only evident in the discal region and medial superior including the tornus. The rest of the wing presents a whitish silver blue spot from the inferior discal area that spreads to touch the wing margin. This spot is intensely colored and covers veins 3A, 1A + 2A, Cu2, Cu1 and M3, while in *asterra* this coloration is spaced and arranged in the manner of elongated triangular rays that are separated from each other. These rays are elongated, translucent and dull on the VHW.

Female: (Pl. I,Fig. 3) wingspan 19.5 mm. Dark brown hue on the FW, with a broad and transverse reddish spot that originates on the costa of the FW and is wide extending beyond the vein Vu2; in *L. asterra* the spot is more elongated and yellowish (Figs. 6, 9). The rest of the FW and HW have spotted opaque grey rays that are equally evident in the subapical and apical zone of the FW. The female lacks the distinctive glossy reflective blue color of the male and the ventral side is like the dorsal but the rays of the gray spots are more patent and thick.

Male genitalia (Figs. 41, 42, 43, 44) as illustrated. Uncus large and rectangular in shape bearing a short, downwardly curved projection from the middle of the dorsal posterior margin; tegumen same length as uncus, rectangular in shape and thin bearing two falces (gnathos) curved at an angle of 45° pointed distally to pointed tip; vinculum narrow and slightly curved at the middle. Saccus very short and straight ending to pointed tip in lateral view, broad with a rounded tip in ventral view. Valvae short with a rectangular posteroventral portion and a dorsally elongated portion larger that is posteriorly pointed as its tip in lateral view. Valvae in ventral view with a long basal hook curved distally (in *L. asterra* the valvae are more narrow basally and swollen distally with a curved tooth (Figure 48). Yuxta on ventral view squared and articulated to the Saccus [Yuxta triangular and smaller in L. asterra (Figure 47)]. Aedeagus short, broad, and slightly curved at the middle. Everted vesica bulbous at base with two evenly spaced cornutal bands of very dense anteriorly projecting spines of the same size in L. asterra the cornutal bands different in shape and with the dorsal band very short with longer projecting spines being the ventral band much longer (Figure 45)].

**Etymology:** species whose name comes from the Greek mythological deity Venus or Aphrodite, for its beauty and alluding to the foamy whitish silver blue stain in the HW.

**Discussion:** this new species differs from *Lucillella asterra* (Plate I, Figs. 4, 5, 6 and Pl. 2, Fig. 9) by the placement of the scarlet red stain the FW and the silver blue of the HW more widespread and not imposed as rays as occurs in *asterra*. It is distinguished from other known species of the genus by the characters previously described, especially Lucillella splendida Hall & Harvey of the Cordillera Oriental of Colombia (Plate I, Figs. 7, 8) and *L. arcoirisa* Hall & Willmott, 2010 of southeast Ecuador because these last two are larger (22-24 mm), and have a FW reddish spot more oblate and transverse. The HW has the extensive whitish blue silver spot covering almost all the wing and arranged in separate rays. Equally, *splendida* has an obvious orange spot on the costal margin of the HW, being most evident on the underside of the wing and is absent in *L. asterra* and *aphrodita*. The new species that we describe here differs from L. camissa from the south of Eastern Cordillera by having a more orange FW coloration and a shiny gray opaqueness of the HW. L. aphrodita was previously known as "Lucillella sp. nov.", by CALLAGHAN (1985: 66) registering it from the biogeographic region of the Chocó, flying in lowland tropical rainforest habitats. However we only have records from higher altitudes (1500-1800 m) in cloud forest habitats.

### Genus *Euselasia* Hübner, 1819

*Euselasia* is the Riodinid genus that contains the greatest number of species with 150 species known from the Neotropical region of which 70 species are found in Colombia (SALAZAR, 2006). These numbers will be increasing due to a revision of this group that has revisited and from which we describe the following species:

3.- *Euselasia tenebrosa* Constantino, Rodríguez & Salazar, **sp. n.** (Plate 3, Fig. 24 and Pl. 4, Fig. 25)

**Holotype:** male, COLOMBIA, **VALLE:** Queremal-km 55, 1200 m, 8-IV-1985, Julián Salazar *leg.* Deposited in the Museum of Natural History, Caldas University (**MHN-UC** 232).

**Male paratypes:** COLOMBIA, **CHOCÓ:** Tadó, 200 m, 21-III-1990, Julián Salazar *leg.* Deposited in the Alexander von Humboldt Research Institute collection (**liAvH**-9678), Villa de Leyva. **NARIÑO:** río Ñambí, 800 m, 20-VIII-2003, V. Solarte *leg.* (CFC). VALLE: Queremal-km 55, 1200 m, 8-IV-1985, Julián Salazar *leg.* Deposited in the **MHN-UC** collection, Manizales, Colombia.

### Diagnosis

Male (Figs. 24-25): forewing length 16 mm. DFW and DHW entirely black without markings or violet-blue reflection as in other related species. The HW distal margin is slightly toothed or pointed near Cu1. The VFW is a uniform light brown, the medial area presents a somewhat straight longitudinal dark brown line but is truncated before reaching the costal margin and in the postmedial zone is another wider disperse dark strip that runs parallel to the outer margin. On the VHW the dark brown line is more elongated and lower medial area turns abruptly in a rounded angle to culminate in the anal margin. The postmedial area with a vestigial dark stripe in the space between Cu1 and M3 presents a triangular black spot near the distal margin with whitish scales on its edges. The marginal area close to the tornus and dentate margin, has 5 white dusted blackish tiny points. Head, antennae, thorax and abdomen black.

### Female unknown.

**Male genitalia** (Fig. 53) as illustrated. Uncus same length as Tegumen, squared with a small dorsal notch; Tegumen rounded caudad with a long blunt lateral projections nearly reaching the Valvae; Vinculum narrow, slightly wider at base. Saccus very short with rounded tip; Valvae pointed, narrow, rounded at base with long, thick lateral setae; dorsal process on transtilla prominent and pointed; Aedeagus broad and straight slightly curved, with a rounded point.

**Etymology:** the species name *tenebrosa* comes from the Latin "*tenebrosus*" meaning dark, in allusion to the intense black coloration that covers the upperside of the four wings.

**Discussion:** this new *Euselasia* species is closely related to *Euselasia orion* Le Cerf, 1958 described from the Micay River, Cauca but differs in that the upperside is dark with characteristic purplish blue hues. The underside is identical with elements already described but in *orion* the FW apical zone is more acute and the marginal edge straight, in *tenebrosa* it is rounded. Also similar is *Euselasia eucrates* Hewitson, 1852 but this species has the upperside with reddish brown spotting and the underside spotted with a distinctive whitish grey, with the medial lines retouched with silver. Another species, *Euselasia baucis aethiops* Rebillard, 1958 presents the black upperside as in *E. tenebrosa* but is differentiated from it by its white silvery underside.

#### Genus Machaya Hall & Willmott, 1995

This extraordinary monotypic genus, known only from the type species *Machaya obstinata* was described by those authors from eastern Ecuadorian (río Machay, Tungurahua). Below we describe a second well differentiated species from the Central Cordillera of Colombia:

4.- *Machaya aenigmatica* Rodríguez, Salazar & Constantino, **sp. n.** (Plate 3, Figs. 20-21)

**Holotype:** male, COLOMBIA, **ANTIOQUIA:** Amagá, 1500 m, 4-I-2002, G. Ramírez *leg.* Deposited in the collection of G. Ramírez, Mitú, Vaupés (**CGR**-416).

#### Diagnosis

Male (Figs. 20-21): forewing length 18 mm. DFW blackish with the presence of a wide oval orange blur red spot from postbasal area and all along the submedial, medial and inferior postmedial regions of the wing, with marginal edge rounded and convex. The rest of the wing has wide black edges (in *M. obstinata* this spot is more reduced and thins through the postbasal and submedial area). The VFW presents the same pattern but the orange spot is clearly translucent and is equally distributed in the same regions of the dorsal area and delimits with wide light brown edges. (in *M. obstinata* the orange spot is partially translucent, less conspicuous and is fragmented; the medial and postbasal region spotted with black).

DHW with edges of the postmedial, anal and tornus black and wide, the orange spot is broader and more extended than in *M. obstinata* with borders well rounded and is clearly translucid the ventral but has a lighter aspect. In *M. obstinata* the VHW orange spot is entirely absent, the wing surface is black. Head, thorax and abdomen black, antennae short.

#### Female unknown.

**Male genitalia** (Figs. 49-50) as illustrated. Uncus narrow laterally with basal portion elongated and rounded. Tegumen triangular in shape with narrow basal portion bearing two falces curved dorsally, tapering gradually to pointed tip; Vinculum narrow and curved basally; Saccus very short and rounded at the end. Valvae narrow and elongated tapering gradually to pointed sharp tip; Aedeagus long and curved tapering to pointed sharp tip. Cornuti absent.

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**Etymology:** HALL & WILLMOTT (1995: 135) baptized *M. obstinate* from the Latin *"obstinate"* for its uncertain systematic position and difficulty locating it in any specific tribe or group within the Riodinidae. Following this precedent the second species continues in the mystery of this situation, and derives its name from the Latin *"aenigmaticus"* alluding to the cloudy significance of its place in the family.

**Discussion:** *M. aenigmatica* differs from *M. obstinata* by the characters described above, the genitalia, and its distribution much farther north in Colombia. This species is apparently restricted to the Central Cordillera cloud habitats. As claimed by HALL & WILLMOTT (1995) the *M. obstinata* color pattern (and the new species) resembles adult *Panaropsis inaria* (Westwood) and *P. thyatira* (Hewitson) (Plate 3, Fig. 22).

Likewise *M. aenigmatica* resembles other species of Amazonian origin Riodinids such as "*Symmachia*" (*=Mesenopsis*) *pena* Hall & Lamas and *Cartea vitula tapajona* (Bates) but these have narrow, elongated, intense yellow or orange wing spots, bordering the costal area and the tornus, the latter showing subapical yellowish spots that identify it easily. *Machaya aenigmatica* is known only from the type specimen. Rare.

### Genus Esthemopsis C. & R. Felder, 1865

A genus of 10 species (CALLAGHAN & LAMAS, 2004), five of wich occur in our country, and now with the existence of a new species flying in the biogeographic Chocó region and close to *Esthemopsis clonia* (Felder) from Colombia.

5.- *Esthemopsis chocoana* Constantino, Salazar & Rodríguez, **sp. n.** (Plate 2, Figs. 12-13)

**Holotype:** male, COLOMBIA, **VALLE:** río Tatabro 150 m, 7-VII-1982, Luis Miguel Constantino *leg.* (CFC).

**Paratypes:** male, COLOMBIA, **VALLE:** río Tatabro, 200 m, IV-1985, Julián Salazar *leg.* (**CJS**). **VALLE:** río Tatabro, 200 m, IV-1985, Julián Salazar *leg.* (**MHN-UC**).

## Diagnosis

Male (Figs. 12-13): forewing length 22 mm. DFW lustrous bluish black except for a wide glassy white strip located in the upper medial and postmedial region and consists of five cells that begin on the costal and are broad and fractionated in each space up to the vein Cu2 (In *E. clonia* they are small and curved and equally placed). VFW translucent, with the same pattern and glassy spots mentioned. VHW with the same pattern but interrupted by a series of 4 vestigial white lines, arranged as spaced rays that fill the spaces of M1, M2, M2 and M3; M3 and Cu1; Cu1 and Cu2, and are translucent on the ventral wing surface but sharper and more manifest. In *E. clonia* these whitish rays on dorsal side are arranged in triangles or drops, except in the female wich are large and elongated.

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**Male genitalia** (no illustrated) but similar to *E. clonia* (Figs. 53-54), uncus rectangular in lateral view downwardly projection in dorsal posterior margin; aedeagus short evenly broad and convex; valvae thick with tip rounded and blunt.

**Etymology:** species named for the type locality, the Chocó biogeographic region located on the pacific slope of the Cordillera Occidental in Western Colombia.

**Discussion:** *Esthemopsis chocoana* differs from *E. clonia* (Plate 2, Figs. 14-15) by the above described characters, the genitalia and its habitat in areas of the tropical rainforest of Chocó. *E. clonia* is more common in the inter-Andean Central and Oriental cordilleras. Another recent species from Panama, *Esthemopsis talamanca* Hall & Harvey, 2007 has more whitish grey rays in the FW and HW and its white stripe is shorter and more continuous than in *E. chocoana*. This new species and relatives resembles diurnal moths of the genus *Hypocrita* Hübner (Pl. II, Fig.16).

### Genus Adelotypa Warren, 1895

A genus consisting of 30 species (*sensu lato*) (CALLAGHAN & LAMAS, 2004), ten of wich fly in Colombia. One of them, *Adelotypa zerna* Hewitson, 1872 is distributed from the Guianas to Brazil and Paraguay. We have found a close relative of this species that inhabits high altitudes of the Central Cordillera of Colombia and is here designated as:

6.- Adelotypa andresi Rodríguez, Constantino & Salazar, sp. n. (Plate III, Figs. 18-19)

**Holotype:** male, COLOMBIA, **ANTIOQUIA:** El Retiro, 2300-2600 m, 22-VI-2002, G. Ramírez *leg.* Deposited in the collection of G. Ramírez, Mitú, Vaupés (**CGR**-421).

**Paratype:** male, COLOMBIA, **ANTIOQUIA:** El Retiro, 2800 m, 26-VIII-2003 G. Ramírez *leg.* Deposited in the same collection (**CGR**).

# Diagnosis

Male (Figs. 18-19): forewing length 13.5 mm. DFW dark brown in color with a series of five longitudinal short streaks, adorned with greenish grey located at the postbasal submedial, disc, submedial, disc, postdiscal and medial area of the FW. There is also a dark area dotted with greenish grey scales in the medial and postmedial region and a narrow hem of the same color in the premarginal area that begins on the costal vein and ends at the tornus. This precedes another thinner line close to the margin of about the same size and direction. This pattern of lines and marks is similar to Adelotypa zerna but more sprinkled with a characteristic greenish grey color. The VFW is whitish like *zerna*, except for a series of dark brown marks at the submedial, discal and medial zones circumscribed towards the cell and notable dark brown triangular marks near the postmedial and marginal region which are not present in *zerna*. These marks especially the spot located in the apical area, which in contrast are absent in *zerna*. The ventral side of the wing is whitish especially on the tornus. DHW with same white coloring and pattern of fragmented short streaks towards the lower portion and bordered with a greenish grey as the FW, however the postmedial area has a narrow, slightly curved, matte

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greenish grey hem, that originates in the apex and culminates in the tornus, like a second marginal line of the same color which in *A. zerna* is lit up and brilliant. In this species the short streaks are more brilliant than in *A. andresi*.

The VHW is whitish in almost its entire extension and lightly sprinkled with short lines in the upper medial region. Three dark brown round spots located separately at the marginal level precede a dark brown colored thin fine marginal line only a little evident in *zerna*.

**Male genitalia** (Figs. 51, 52, 54) as illustrated. Uncus narrow and rectangular in shape, with Tegumen of the same size and shape. Falces curved dorsally at an angle of 45°, tapering to pointed tip; Vinculum broad and curved at the middle; Saccus short and rounded. Valvae in ventral view with two peculiar narrow arms with rounded and sclerotized tips black in color. Aedeagus broad and slightly curved

**Etymology:** *Adelotypa andresi* is dedicated to Andrés Rodríguez, son of the first author, for his valuable assistance in the field.

**Discussion:** this new entity is phylogenetically related to *Adelotypa zerna* and *A. densemaculata* Hewitson, 1870, apparently being three sisters species, but this new species differs in morphological characters and genitalia already detailed. It differs from *A. densemaculata* by this species having the dorsal brown marks or streaks on a light brown background without grey-green coloration and the verso sprinkled with numerous small dark brown marks that hem the HW margin. Furthermore, the distribution of the three species is different, *A. densemaculata* flies from Central America to Colombia in the medium altitude coffee production areas (1000-1700 m); *A. zerna* is frequent and local in the southeast of Brazil and Paraguay (D`ABRERA, 1994; SOARES, 2005; EMERY, BROWN & PINHEIRO, 2006), and this new species that inhabits high altitudes in the Central Cordillera of Colombia (2000-2800 m).

### New records of little known species in Colombia

7.- Esthemopsis macara (Grosse-Smith) (Plate III, Fig. 17)

Grose-Smith, H. Rop. Exot., III: 9. Eryc. I. Pl. I. (1902)

This is a rare species described from Valdivia, Colombia (GROSE-SMITH, 1902). D´ABRERA (1994) which most likely refers to a town called Puerto Valdivia in Antioquia. This locality is close to the lower Cauca River located in the northeast of the department. We have a male from the cloud forest of Risaralda in the Western Cordillera which was found dead on the bank of a stream. The type figured by D`ABRERA (1994) under the genus *Lepricornis* Felder, differs from our specimen by the white stripe of the HW being narrower and thin, which suggests a probable subspecies.

ME, COLOMBIA, **RISARALDA:** San Antonio del Chamí, quebrada Sutú, a 1800 m, male, VIII-1985, Julián Salazar *leg* (CJS).

8.- *Themone pulcherrima* (Herrich-Schäffer) (Lamina IV, Figs. 27 y 28) H-Schäffer, G. Sam. N. bekk. auss. Schmett. (1853)

The type of this species was described from "Suriname" under the genera *Eurygona* Boisduval and *Themone* Westwood and also as a subspecies of *Lymnas* Blanchard by Stichel in 1930; of *Melanis* (Hübner) by BRIDGES (1994) and finally in the genus *Themone* by REBILLARD (1958) (see details in HÄUSER *et al.*, 2003). This Riodinid has a wide distribution in the tropical rainforest of South America but is extremely local. We have a single record from record from the eastern slope of the Oriental Cordillera in the department of Putumayo, Colombia.

ME, COLOMBIA, **PUTUMAYO:** Mocoa-CEA, at 715 m, male, XI-2008, A.M. Mora *leg.* (CUN).

9.- *Napaea mellosa* Hall & Harvey (Plate IV, Fig. 30) Hall, J. P. & Harvey, D., Ent. Soc. Washington: 119-120, F. 30a, b. (2005)

This species is a recent discovery from eastern Ecuador, achievement of the above mentioned authors whom cite in the material examined of their publication a male from Putumayo ("Jumbato") deposited in the Museum of Natural History in Paris (HALL, WILLMOTT & HARVEY, 2005). Here we report another male captured in the eastern Department of Cauca.

ME, COLOMBIA, **CAUCA:** río Villalobos, a 800 m, male, IV-1993, Julián Salazar *leg.* (**MHN-UC**).

10.- *Cyrenia martia themis* Le Cerf (Plate IV, Fig. 31) Le Cerf, H. Mem. Mus. Hist. Nat., 15 (2): 175-176, Pl. II, Fig. 12 (1958)

A monotypic genus species that has three races besides the nominate which are: *C. martia androgyne*, Stichel1910 from Bolivia, *C. martia pyrippe* Godman & Salvin, 1878 from Panama and *C. martia themis* Le Cerf, 1958 from Colombia (CALLAGHAN & LAMAS, 2004). The latter was described from Muzo (eastern Boyacá) with additional material from the same locality and from "Bogotá" (REBILLARD, 1958). It is apparently a subspecies confined to the Magdalena river, flying in tropical rainforest areas. It was not listed by CALLAGHAN (1985) in his study on Colombian Riodinids. Here we report new recent records from Colombia.

ME, COLOMBIA, **ANTIOQUIA:** Amalfi-río Porce, 9-VII-2003, E. Henao *leg.* (**CJIV**). **SANTANDER:** Serranía de los Yariguíes, male, VII-2005, C. Ríos-Málaver *leg.* (**MHN-UC** 327). **TOLIMA:** Natagaima, male, without data, G. Ramírez *leg.* (**CGR**-51).

11.- *Menander aldasi* Hall & Willmott (Plate IV, Fig. 29) Hall, J.P. & Willmott, K., Trop. Lep., 6 (2): 133, Fig. 3a, b. (1995)

Another interesting find originally reported from Ecuador (Pastaza) by a single male deposited in the British Museum of Natural History (HALL & WILLMOTT, 1995).

This species is reported here for the first time for Colombia from a specimen captured in the eastern slope of the Eastern Cordillera and deposited in the collection of E.W. Schmidt-Mumm, (IiAvH). A rare and local species, the female is



similar to *Menander laobotas* Hewitson, 1875 but without the subapical white spots in the FW. Ventral side is white, dotted with dark grey spots in the apical areas and the tornus dark brown.

ME, COLOMBIA, **CAUCA:** río Villalobos, at 800 m, male, IV-1993, Julián Salazar *leg.* (**IIAvH**- 10339); río Villalobos, at 800 m, female, IV-1993, Julián Salazar *leg.* (**IIAvH**-9866).

12.- *Euselasia violacea* Lathy (lamina IV, Fig. 26) Lathy, P. Ann. Mag. Nat. Hist. 14: 283 (1924)

According to REBILLARD (1958: 147) this beautiful *Euselasia* species was described but not illustrated by its author Percy Lathy from the holotype deposited in the Museum of Natural History in Paris. The specimen that Rebillard figured in his study also comes from Colombia ("Bogotá"). We are reporting this species for the biogeographic region of Chocó and pacific slope of the Western Cordillera (see also SALAZAR, 2006).

ME, COLOMBIA, **CHOCÓ:** Guarato-Marmolejo, a 300 m, male, 21-VII-1990, Julián Salazar *leg.* (**CJS**). **RISARALDA:** Santa Cecilia-Tapartó, a 800 m, male, 21-VII-1980, Julián Salazar *leg.* (**CJS**).

13.- *Symmachia titiana* Hewitson (Plate V, Figs. 34-35) Hewitson, W. Ch. Ecuat. Lep., 51 (1870)

A Species originally described from the town of "Ashpiyaco", Ecuador (HEWITSON, 1872) and also reported for Colombia at that time from specimens captured on the east slope of the Central Cordillera, near the Magdalena River (SALAZAR & CONSTANTINO, 2000). This singular species is characterized by its beautiful orange colour. Related species were not known until Attal (in) GALLARD & ATTAL (2009: 165) described *Symmachia aureus*, a second species from southeast Ecuador. We have a specimen from the Western Cordillera resembling *aureus* with the VFW identical but with a wide black apical area on the ventral much more notable than *aureus*, and the marginal border wider and thinner. The HW has an extensive orange spot (in *aureus* it is smaller and the ventral is entirely dark brown) that delimits a wider sharp black wing margin than the Ecuador nominate type. For these reason we are denominating this race *Symmachia titiana occidentalis* Salazar, Rodríguez & Constantino ssp. n. (Plate IV, Fig. 32 and Pl. 5, Fig. 33).

**Holotype:** male, COLOMBIA, **RISARALDA:** San Antonio del Chamí, 1800 m. Deposited in the collection of G. Ramírez (**CGR**-544).

*Symmachia titiana* Hewitson, 1870: ME, COLOMBIA, ANTIOQUIA: Envigado, female, 1800 m, 28-XII-1999, G. Ramírez *leg* (CGR-340); Amagá, male, G. Ramírez *leg*. (CGR-227); Don Matías, female, G. Ramírez *leg*. (CGR-549). CALDAS: Manzanares, male, 15-VI-1990, Julián Salazar *leg* (IiAvH-10648); Pensilvania-quebrada La Linda, a 1500 m, 2 males & 1 female, VI-1990, Julián Salazar *leg*. (MHN-UC).

#### 14.- *Ithomeis eulema serena* Stichel (Plate V, Fig. 36) Stichel, H. Genera Insectorum, 112: 119 (1910)

According to CALLAGHAN & LAMAS (2004: 150) this Riodinid was described in the genus *Nahida* Kirby, although both authors doubted that Colombia is its true origin. *I. eulema serena* was actually described from Colombia by STICHEL (1910: 119) but without an indication of specific locality. The holotype is deposited at the British Museum of Natural History (col. Grosse-Smith). Likewise SEITZ (1924: Fig. 127d) and D`ABRERA (1994: 953) illustrate a female from "Cachabe" (=Casabe, Antioquia), a locality in the Magdalena river in Central Colombia. We are reporting this species from the Chocó region as well as STICHEL (1926). Rare and local. The mimetic co-models are the nymphalids *Eresia ithomioides eutropia* Hewitson, 1874 and *E. ithomioides* Hewitson, 1864 (Plate V, Fig. 37).

ME, COLOMBIA, VALLE: río Tatabro, 100 m, 2 females, 12-IV-1985, Luis Miguel Constantino *leq.* (CFC).

15.- *Ithomeis aurantiaca corena* C. & R. Felder (Plate V, Fig. 40) C. & R. Felder, Wien. Ent. Montaschr., 6 (12): 412 (1862)

The Felders, father and son, described this species as belonging to the invalid genus *Ithomiopsis* Felder with a male coming "Nueva Granada, Bogotá". Currently it is considered a race of *I. aurantiaca* Bates, 1862 (CALLAGHAN & LAMAS, 2004). In Colombia it is found in the eastern slope of the Oriental Cordillera (CALLAGHAN, 1985).

ME, COLOMBIA, META: Villavicencio, female, Ernesto W. Schmidt-M. *leg.* (**IiAvH**-10292); Cubarral-río Ariari, 800 m, female, 24-VIII-1989, Julián Salazar *leg.* (**CJS**); Villavicencio, Bosque de Bavaria, a 800 m, male, 10-IV-2002, Luis Miguel Constantino *leg.* (**CFC**).

16.- *Ithomeis aurantiaca mimica* Bates (no illustrated) Bates, H.W. Trans. Linn. Soc., London, 23 (3) (1862)

Another race described from Brazilian Amazon is distributed in Colombia in this same region and the Putumayo, where we have gathered the few known records from collections. Local.

ME, COLOMBIA, **AMAZONAS:** Puerto Nariño, 100 m, male, 20-VII-1989. Luis M. Constantino *leg.* (**CFC**); río Loreto Yacú, lago de Tarapoto, 100 m, male, 20-VII-1989, Luis M Constantino *leg.* (**CFC**). **PUTUMAYO:** Mocoa, 520 m, male, Julián Salazar *leg.* (**IIAvH**-10285). **PUTUMAYO:** Mocoa-río Afán, 520 m, male, IX-1990, Julián Salazar *leg.* (**CJS**).

17.- *Nahida coenoides* Hewitson (Plate V, Fig. 38) Hewitson, W. Ch. Equat. Lep., 58 (1870)

This species is known from Ecuador through Buckley's collections but was described in the invalid genus *Threnodes* (HEWITSON, 1872). In Colombia it has only been recorded in the southeast of the Cordillera Oriental flying in cloud habitats (SALAZAR, 2003). Rare and local. It flies sympatrically with the Nymphalids *Eresia*  *datis fassli* Röber, 1913 and *E. datis moesta* Salvin & Godman, 1868 (Pl. V, Fig. 39) whose females have the same wing color and pattern.

ME, COLOMBIA, **CAUCA:** Santa Rosa-río Villalobos, 1300 m, female, Julián Salazar *leg.* (**IiAvH**-10299); Santa Rosa-río Villalobos, 1300 m, 2 males, 14-XII-1994, Julián Salazar *leg.* (**CJS**).

18.- *Pachytone gigas ignifer* Stichel (Plate III, Fig. 23) Stichel, H. Genera Insectorum, 112b: 281 (1911)

Riodinid described from the río San Juan, Chocó coming from the collection of O. Staudinger (STICHEL, 1911). SEITZ (1916) and DE VRIES (1997) affirm that it is a race of *P. gigas* Godman & Salvin which varies by having brilliant orange-red wing coloration, on the FW with an oblique blackish band that crosses it and the HW with wide black marginal borders. In addition to the Chocó, the usual region reported (CALLAGHAN, 1985) we record it also from the Magdalena river.

ME, COLOMBIA, ANTIOQUIA: Porce, male, 1-V-2003, G. Ramírez leg. (CGR-480). CALDAS: Samaná-río Don Diego (El Corozo), a 800 m, male, 19-VII-2001, J. Vargas leg. (CJIV). VALLE: río Tatabro, a 200 m, male, 7-IV-1985, Julián Salazar *leg.* (CJS); río Tatabro, a 200 m, male, 7-IV-1982, Luis M. Constantino leg. (CFC).

19.-*Panaropsis thyatira* Hewitson (Plate III, Fig. 22) Hewitson, W. Ch. Equat. Lep. (1853)

This rare species was described from the Amazon River (HEWITSON, 1872) and the genders are highly dimorphic, especially the female which resembles other Riodinid species (WATSON & WHALLEY, 1975; D`ABRERA, 1994). According to HALL (2002) *thyatira* is distributed from Colombia to Brazil and the Guianas and in Colombia has been recorded from the east side of the Cordillera Oriental and the Amazon (CALLAGHAN, 1985). Local.

ME, COLOMBIA, **AMAZONAS:** Puerto Nariño, Parque Nacional Natural Amacayacu, 100 m, male, 1-I-1991, Luis M. Constantino *leg.* (**CFC**). **HUILA:** Colombia, female, Ernesto W. Schmidt-M. *leg.* (**IiAvH**-9921).

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**Figures:** 1, 2,  $3 = Lucillella aphrodita n. sp. (Holotypes 1-2 <math>\circlearrowright$ ; 3  $\bigcirc$ )4, 5,  $6 = Lucillella asterra (G-S.) (4-5 <math>\circlearrowright$ ; 6 y Lámina II fig. 9  $\bigcirc$  $\bigcirc$ )7,  $8 = Lucillella splendida (H. & W.) (7-8 <math>\circlearrowright$ )



**Figures: 10-11**= Colaciticus seitzi sp. n. (Holotype ) **12-13**= Esthemopsis chocoana sp. n. (Alotype ) **14-15**= Esthemopsis clonia (Fldr.) **16** = Hypocrita sp. ()



Figures: 17= Esthemopsis macara (G-S)  $\bigcirc$ 18 -19 = Adelotypa andresi sp. n. (Holotype  $\bigcirc$ ) 20-21= Machaya aenigmatica sp. n. (Holotype  $\bigcirc$ ) 22 = Panaropsis thyatira (Hew.)  $\bigcirc$ 23 = Pachytone gigas ignifer (Stich.)  $\bigcirc$ 24 = Euselasia tenebrosa sp. n. (Paratype  $\bigcirc$ ) 233





Figures: 25= Euselasia tenebrosa sp. n. (Paratype ♂) 26= Euselasia violacea (Lathy) 👌 27-28 = Themone pulcherrima (H-Schäff.) ♂
29 = Menander aldasi (H. & W.) ♂
30 = Napaea mellosa (H. & H.) ♂
31 = Cyrenia martia themis (Le Cerf) ♂
32 = Symmachia titiana occidentalis spp. n. (Holotype ♂)



Figures: 33= Symmachia titiana occidentalis spp. n. (Holotype ♂)

- **34-35** = *Symmachia titiana* (Hew) (34 ♂, 35 ♀)
- **36** = Ithomeis eulema serena (Stich.)  $\stackrel{\sim}{\bigcirc}$
- 37= Eresia ithomioides (Hew) ♂ Nymphalidae
- **38** = *Nahida coenoides* (Hew.) 3
- **39** = *Eresia datis moesta* (S. & G.) ♂ Nymphalidae
- 40= Ithomeis aurantiaca corena (Fldr.) ♂



Figures 41-50: Male genitalia. 41. *Lucillella aphrodita*, lateral view. 42. *L. aphrodita*, ventral view. 43. *L. aphrodita valvae*. 44. *L. aphrodita* aedeagus tip with cornuti. 45. *L. asterra* aedeagus tip with cornuti. 46. *L. asterra*, lateral view. 47. *L. asterra*, ventral view. 48. *L. asterra* valvae. 49. *Machaya aenigmatica*, lateral view. 50. *M. aenigmatica*, ventral view.



Figures 51-58. Male genitalia. 51. Adelotypa andresi, lateral view. 52. A. andresi, ventral view. 53. Euselasia tenebrosa, lateral view. 54. A. andresi, detail of valva in ventral view. 55. Colaciticus seitzi, lateral view. 56. C. seitzi, detail of valva. 57. Esthemopsis clonia, lateral view. 58. E. clonia, detail of valva.