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ON THE PRESENCE OF CERTAIN RARE SPECIES OF RIODINIDAE (LEPIDOPTERA: PAPILIONOIDEA) IN A FOREST FRAGMENT ON THE EASTERN SLOPE OF THE COLOMBIAN CORDILLERA ORIENTAL AND A NEW REGIONAL LIST

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Resumen

In a survey of the Riodinidae (Lepidoptera) of a small forest fragment near Villavicencio, Colombia, 23 of the 115 species recorded were found to be new records for the region. A new regional list of 317 species was also compiled.

Palabras clave: Riodinidae, Colombia, Eastern cordillera, new records.

SOBRE LA PRESENCIA DE ALGUNAS RARAS ESPECIES DE RIODINIDAE (LEPIDOPTERA: PAPILIONOIDEA) EN UN FRAGMENTO DE BOSQUE DEL PIEDEMONTE ESTE DE LA CORDILLERA ORIENTAL COLOMBIANA Y UNA NUEVA LISTA REGIONAL DE ESPECIES

Abstract

En un inventario de los Riodinidae (Lepidoptera) existentes en un pequeño fragmento de bosque cerca de Villavicencio, Colombia, 23 de las 115 especies registradas resultaron ser nuevos registros para la región. También se compila una nueva lista regional de 317 especies.

Key words: Riodinidae, Colombia, Cordillera Oriental, nuevos registros.

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INTRODUCTION

The family Riodinidae Grote, 1895 is a group of small butterflies distributed worldwide but whose greatest richness in genera and species is found in the Neotropical region (DE VRIES, 1997; SCOBLE, 1995; VELEZ & SALAZAR, 1991). The adults display a bewildering diversity of colors and many species have the habit of perching during specific hours of the day in forest clearings or on the underside of leaves, a characteristic of the group (CALLAGHAN, 1982). Because a good deal of the species are quite local and scarce, many are rarely seen or recorded in the regional lists of South America (BREVIGNON, 2012; DOLIBAINA *et al*., 2012; GALLARD, 2008; JAUFFRET & JAUFRET, 2009). This rarity in the Riodinidae is due to their sporadic populations, low population densities and the predominance of species being strictly forest dwellers. Few species exist in open areas or habitats of succession as species in the Northern Hemisphere, and considering the broad spectrum of their host plants, very few are agricultural pests. Many species are known from only a few or even a single specimen, an example is seen in the recent re-discovery of the *Joiceya praeclarus* Talbot, 1928, a Brazilian species only known from two males captured in the Mato Grosso more than 80 years ago (GREVE *et al*., 2013).

Species inventories are an important first step to understanding the fauna of a region. Conservation decisions are impossible without knowing what species occur in an area. During an intensive 3 year sampling of a small linear forest fragment near Villavicencio, Colombia we encountered many new and surprising records of Riodinidae for this area. We present these new records with illustrations and also a new regional list of Riodinidae.

METHODS

The study area

The study area is a small fragment of lowland forest with an extension of 3,000 sq. meters (30 m X 100 m) covering an intermittent stream in the piedmont region of the Cordillera Oriental near Villavicencio, Colombia. The site is located at the coordinates 4°03'48N 73°42'04W at 495 masl in the Northern Andes phytogeographical region described by GENTRY (1992) and near the confluence of the Northern Colombia and Venezuela and the Amazon regions shown in Fig.1. Precipitation is high, near 4,400 mm per year, classifying the forest as a very humid tropical forest (ESPINAL & MONTENEGRO, 1963). The rainy season is from March to December and the dry season, with precipitation of less than 100 mm/month, is during the months of January and February. The average yearly temperature is 26.5 °C. The study area is connected to larger forest fragments by means of linear forest strips and hedgerows that the Riodinidae use as migration corridors.

The forest (Fig. 3) is basically secondary forest with a canopy height of 20 meters and a small number of old trees with a diameter of greater than 50 cm scattered through the area, remnants of the original forest. Some of the species include *Ficus* (Moraceae), *Terminalia* (Combretaceae), *Caryodendron*, *Alchornea* (Euphorbiaceae), *Socratea exorrhiza* (Palmae), and numerous species of *Inga* (Leguminosae). The commoner understory trees are *Cassia*, *Senna*, *Bauhinia* (Leguminosae), *Miconia* (Melastomataceae), and *Vismia* (Guttiferae). The undergrowth small shrubs and

herbs had been clear-cut in the past but not during the time of the study. This small woody and herbaceous growth is now rich in plants of the families Rubiaceae, Solanaceae, Heliconiaceae, and Zingiberaceae. The two edges of the forest border that border on an agricultural matrix allow colonization of pioneer trees like *Cecropia* (Moraceae). In low, swampy areas there are dense growths of *Calathea lutea* (Marantaceae).

Sampling method

A survey of the Riodinid assemblage inhabiting the study area was conducted between the months of May, 2012 and September, 2014. The survey was done using the "Pollard walk" method of sampling (POLLARD, 1977; CALDAS & ROBBINS, 2003), recording species and abundance along a fixed, timed trajectory. The 150 m long transect was walked for 40 minutes twice daily an average of 26 days a month. Individual butterflies were identified by sight or netted when identification was uncertain. Unknown species were vouchered for further investigation. Vouchers were deposited in the collection of (MHN-UCa).

Collection acronyms

CCC: Collection of Curtis Callaghan, Bogotá, Colombia.
CJFL: Collection of J. F. Le Crom, Bogotá, Colombia.
CJS: Collection of Julian Salazar E., Manizales, Colombia.
ICN-MHN: Instituto de Ciencias Naturales, Universidad Nacional, Bogotá.
MHN-UCa: Museo de Historia Natural-Universidad de Caldas, Manizales, Colombia.

Figure 1. Study site (red circle) in relation to the phytogeographic regions described by Gentry (1992) as areas of high plant endemism. 1. The Northern Andes. 2. Northern Venezuela and Colombia. 3. The Amazon.

Figure 2. Satellite photo showing the study site with a red circle. Dark green areas are forest fragments and lighter green areas are agricultural lands.

Figure 3. The south-west corner of the study area. The hedgerow seen in the lower left part of the photo is used by some species as a migration corridor.

RESULTS

During the course of the survey 115 species of Riodinidae were recorded with 23 species that are new for the Villavicencio region. The new records are the following:

EUSELASIINAE

Euselasia aurantiaca (Salvin & Godman, 1868) (Pl. 1, Fig 3)
This species ranges from W. Mexico through Central America to Venezuela and Colombia. Various subspecies have been described, *E. a. marginata* Lathy, 1926 from Valencia, Venezuela and a new subspecies being described from Muzo, Colombia on the west flank of the Cordillera Oriental. A single female was recorded on xi/24/2013 and appears to be a distinct undescribed subspecies.

Euselasia euphaes (Hewitson, [1855]) (Pl. 1, Fig. 1)
An Amazonian species ranging through Brazil, Peru and Ecuador. A female was registered on vii/14/2013.

Euselasia venezolana Seitz, 1913 (Pl. 1, Fig. 5)
This species is known from French Guiana, Venezuela and Colombia. The three examples registered from our study site are closer to the nominate subspecies from northern Venezuela than *E. venezolana hypocala* Le Cerf, 1958 described from the Putumayo region of S.E. Colombia.
Records: 1♂ x/10/2013, 1♀ i/21/2014, 1♂ ix/18/2014.

RIODININAE

Tribe ***Mesosemiini***

Mesosemia misipsa Hewitson, 1859 (Pl. 1, Fig. 2)
Ecuador, Brazil, French Guiana
A single record for Colombia from Leticia (SALAZAR *et. al.*, 2009).
Records: 1♀ vii/27/2013.

Mesosemia metura Hewitson, [1873] (Pl. 1, Fig. 4)
Records are from Brazil, the Amazon to Mato Grosso, Peru and the department of Putumayo, Colombia (SALAZAR *et. al.*, 2009). The Villavicencio record is 1♂ on x/11/2012.

Mesosemia *cf.* ***walteri*** Brévignon, 1998 (Pl. 1, Fig. 6)
Ranges from French Guiana, Guyana, and Brazil to Leticia, Colombia. This species is easily confused with the sympatric *Mesosemia cippus.* All records are from the rainy season of 2013 and 2014. A single 5th instar larva was raised on a *Palicourea* sp. (Rubiaceae) in June, 2013.
Records: 20♂♂, 3♀♀(fig. 4).

Tribe ***Riodinini*** Grote, 1895

Lyropteryx terpsichore Westwood, 1851. (Pl. 3, Fig. 26)
Known from Brazil, Paraguay and Bolivia. There is another record from Remolinos, Meta in the Le Crom collection (SALAZAR, 2014).
Records: 1♂ ii/10/2014.

Notheme erota (Cramer, 1780) (Pl. 2, Fig. 14)
Ranges from So. Mexico to Bolivia. Reported from the Cordillera Occidental and Cordillera Central of Colombia by ANDRADE (2002).
Records: 1♂ ix/06/2012, 1♀ xi/26/2013, 1♂ iii/19/2013.

Colaciticus johnstoni (Dannatt, 1904) (Pl. 3, Fig. 24)
Known range is Guyana, Brazil and Ecuador. This species is classified as rare and infrequently seen probably due to its canopy dwelling habits (D. Arenholz, p.c.). Records from the study site: 4♂♂, xii/18/2012, viii/18/2013, ix/20/2013, x/18/2013.

Chalodeta chaonitis (Hewitson, 1866) (Pl. 1, Fig. 7)
Another widespread species that ranges from Mexico to southern Brazil with few records for Colombia. HALL (2002) lists a specimen from Neiva, Huila, noting it may be mislabeled and PINZON (2003) records this species from the Rio Apaporis in the lower Amazon of Colombia.
Records: 4♂♂, ix/20/2012, ix/22/2013, ix/24/2013, xi/03/2013.

Chalodeta lypera (H. Bates, 1868) (Pl. 1, Fig. 8)
Guatemala to Brazil. We could not find any other records for Colombia. Records: 1♀ii/09/2014, 1♂ ix/3/2014.

Pheles bicolor (Godman & Salvin, 1886) (Pl. 3, Fig. 25)
This species had been known only from the type specimen from Bugaba, Panama for over 100 years. Since that time only a couple of specimens have been collected, one from Guatemala: Petén, Parque Nacional Tikal, 21-Sept-1992, J.V.O. leg., in the collection of the Maguire Center in Gainesville, Fl and another specimen from Brazil, Minas Gerais, km 49 o Belo Horizonte, Brasilia, Paracatu, iii/1/1966, is in the collection of Curtis Callaghan. We now report this species from Villavicencio, Colombia. All records are from the rainy season: 3♂♂, v/05/2012, x/09/2013, x/24/2013.

Baeotis hisbon (Cramer, 1775) (Pl. 3, Fig. 21)
D'ABRERA (1994) cites this species from Peru and Brazil and PIÑAS (2007) illustrates a specimen from Ecuador as *B. staudingeri*. We have four records from the Villavicencio site: 4♂♂, ix/2/2013, ix/18/2013, xi/16/2013, i/20/2014.

Tribe ***Symmachiini*** Bates, 1859

Mesene nepticula (Möschler, 1876) (Pl. 2, Fig. 17)
The nominate species was described from Surinam. The local subspecies, *M. nepticula stigmosa* Stichel, 1910 is known from Itaituba-Tapajos, Brazil and Ecuador. A rare visitor to the study area, we have late rainy season and early dry season records: 3 ♂♂, x/22/2012, xi/11/2013, ii/8/2014.

Mesene nola eupteryx H. Bates, 1868 (Pl. 2, Fig. 13, Fig.15)
Known from Amazonas (Para) and Guianas (STICHEL, 1910), with other records from Surinam and Ecuador. Not recorded by CALLAGHAN (1985) for the Eastern slopes. A recurrent colonizer of the study area primarily during the rainy season but with some dry season records.
Records: 20 ♂♂, 9 ♀♀ (fig. 6).

Esthemopsis cf pallida Lathy, 1932(Pl. 3, Fig. 20)
This specimen shares many characters with *E. pallida*, which has been resurrected recently as a good species (DIAS *et. al.*, 2014) The diagnostic characters of *pallida*, the dark frontal area on the head, the dark hindwing fringe and the white subapical stripe that reaches the space CuA1-CuA2 are present on this specimen but *pallida* has only been found in the cerrado of central Brazil. Another similar species is *Esthemopsis macara* (Grose-Smith, 1902) described from the Cordillera Occidental of Colombia (RODRIGUEZ *et al.*, 2010). Records: 1♀vii/14/2013.

Esthemopsis pherephatte (Godart, [1824]) (Pl. 3, Fig. 22)
A member of a group of Riodinid species that mimic Arctiidae and Notodontidae moths. In the study area the other mimetic species include ***Melanis electron, M. marathon,*** and ***Isapis argyrtus.*** Originally described from Brazil, this species ranges from southern Mexico to Brazil.
Local. 27 records (fig. 5)

Tribe ***Incertae sedis***

Pachythone xanthe H. Bates, 1868 (Pl. 1, ♂ Fig. 9, ♀Fig. 10)
P. xanthe can be confused with *Mesenenola* females in the field and in collections (PIÑAS, 2007) (Pl 31 number 453 as *Mesene* sp. 1). STICHEL (1910) reported this species from the western Amazon of Brazil and it has also been recorded from Ecuador. Not cited by CALLAGHAN (1985). Records: 9 ♂♂, all from the rainy season, April through December; 1♀i/17/2014 (fig. 7).

Comphotis sophistes (H. Bates, 1868)(Pl. 2, Fig. 12)
This tiny species is Amazonian, known from Surinam and Brazil. Records for the Villavicencio region are 3♂♂from Cundinamarca: Medina, Guichiral, Oct 1988, J. Salazar leg. (CJS) and for the study area 1♂ on x/17/2013.

Tribe ***Nymphidiini*** Bates, 1859

Calospila siaka (Hewitson, [1858]) (Pl. 2, Fig. 16)
A striking Amazonian species that was described from Brazil.
Records: 2 ♂♂, xii/24/2012, v/01/2014.

Calospila rhodope amphis (Hewitson, 1870) (Pl. 2, Fig. 18)
Another Amazonian *Calospila* that ranges from French Guiana, Brazil, Peru and Ecuador.
Records: 1 ♂ v/31/2014.

Livendula leucophaea (Hübner, [1821]) (Pl. 2, Fig. 11)
Only one locality record for Colombia could be found, from the Amazonia in PINZON (2008). Oddly this species has only been recorded from the study area during the month of September and the first few days of October.
Records: 12 ♂♂, 3 ♀♀ (Fig. 8).

Theope thootes Hewitson, 1860 (Pl. 3, Fig. 23)
Originally described from Brazil, *thootes* has also been reported from French Guiana and Peru (HALL, 1999).
Records: 1 ♂ ii/5/2014.

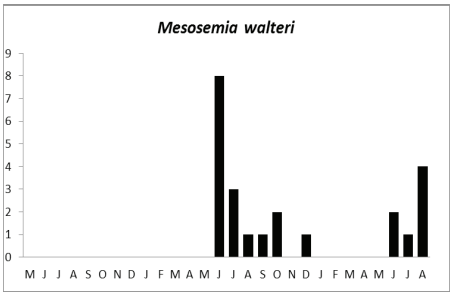


Figure 4.

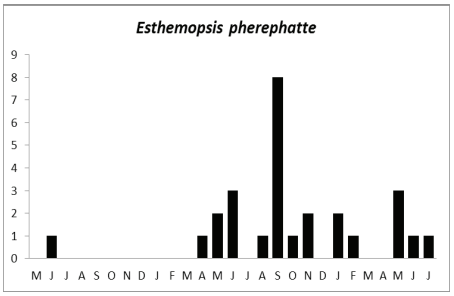


Figure 5.

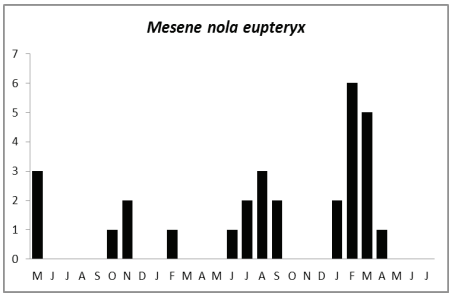


Figure 6.

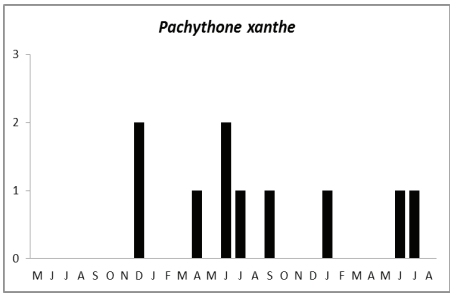


Figure 7.

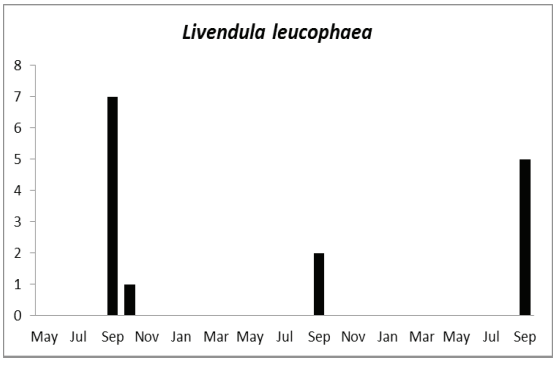
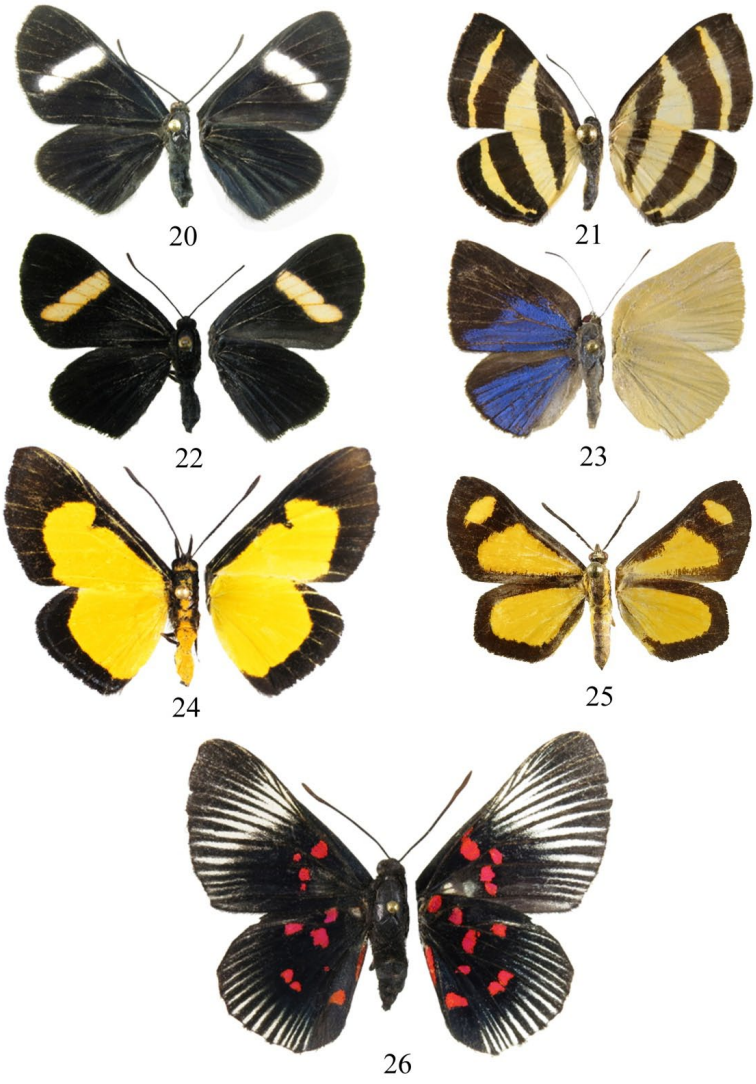


Figure 8.

Figures 4-8. Individual records by month, from May 2012 to September, 2014.

Pl. 1. 1. *Euselasia euphaes* female. 2. *Mesosemia misipsa* female. 3. *Euselasia aurantiaca* female. 4. *Mesosemia metura* female. 5. *Euselasia venezolana* female. 6. *Mesosemia cf. walteri* female. 7. *Chalodeta chaonitis* male. 8. *Chalodeta lypera* female.9. *Pachythone xanthe* male. 10. *Pachythone xanthe* female.

Pl. 2. 11. *Livendula leucophaea* female. 12. *Comphotis sophistes* male. 13. *Mesene nola* male. 14. *Notheme erota* male. 15. *Mesene nola* female. 16. *Calospila siaka* male. 17. *Mesene nepticula* male. 18. *Calospila rhodope male.* 19. *Mesene epaphus* female (for comparison with *M. nepticula*).



Pl. 3. 20. *Esthemopis cf pallida* female. 21. *Baeotis hisbon* male. 22. *Esthemopsis pherephatte* male. 23. *Theope thootes* male. 24. *Colaciticus johnstoni* male. 25. *Pheles bicolor* male. 26. *Lyropteryx terpsichore* male.

A REGIONAL SPECIES INVENTORY OF RIODINIDAE

The Villavicencio region in this work includes the forest and piedmont area from the Sierra de la Macarena in the south-west to the town of Medina in the north-east in the department of Meta, Colombia. The area includes close to 150 kilometers of the east flank of the Cordillera Oriental from 1200 to 200 meters above sea level. This area is one of the most biologically diverse in Colombia and is a subsection of the Tropical Andes biodiversity hotspot, denominated so due to the great number of species and endemics it harbors (MYERS *et. al.*, 2000).

This list was compiled from the literature: ANDRADE (2002); CALLAGHAN (1985); CONSTANTINO *et. al.* (2012a); CONSTANTINO *et. al.* (2012b); D'ABRERA (1997); HALL,(1999); HALL & HARVEY (2001); HARVEY (2002); RODRIGUEZ *et. al.* (2010); SALAZAR (2003); SALAZAR (2006); SALAZAR *et. al.* (2009); SALAZAR (2014); WARREN *et al.* (2013); and from collections: (ICN-MHN); (MHN-UCa); (CCC); (CJFL); (CJS).

			Distribution (m)		
Riodinidae Grote, 1895			>500	500-900	900+
Subfamily ***Euselasiinae***					
Tribe ***Euselasiini***					
1	*Euselasia artos*	(Herrich-Schäffer, [1853])		•	
2	*Euselasia albomaculiga*	Callaghan, 1999		•	
3	*Euselasia angulata*	(H. Bates, 1868)		•	
4	*Euselasia attrita*	Seitz, 1916		•	
5	*Euselasia aurantiaca*	(Salvin & Godman, 1868)		•	
6	*Euselasia brevicauda*	Lathy, 1926		•	
7	*Euselasia cafusa*	(H. Bates, 1868)		•	
8	*Euselasia catoleuce*	(Hübner, 1823)		•	
9	*Euselasia corduena*	(Hewitson, 1874)		•	
10	*Euselasia crinon*	Stichel, 1919		•	
11	*Euselasia ella*	Seitz, 1916		•	
12	*Euselasia eryphila*	Stichel, 1919		•	
13	*Euselasia euboea*	(Hewitson, [1853])	•		
14	*Euselasia eucrates*	(Hewitson, 1872)		•	
15	*Euselasia eugone*	(Hewitson, 1856)		•	
16	*Euselasia eulione*	(Hewitson, 1856)		•	
17	*Euselasia eumedia*	(Hewitson, [1853])		•	
18	*Euselasia eumenes*	(Hewitson, [1853])		•	

			Distribution (m)		
Riodinidae Grote, 1895			>500	500-900	900+
19	*Euselasia eupatra*	Seitz, 1916		●	
20	*Euselasia euphaes*	(Hewitson, [1855])		●	
21	*Euselasia euriteus*	(Cramer, 1777)		●	
22	*Euselasia euromus*	(Hewitson, 1856)		●	
23	*Euselasia euryone*	(Hewitson, 1856)		●	
24	*Euselasia eusepus*	(Hewitson, [1853])		●	
25	*Euselasia eustola*	Stichel, 1919		●	
26	*Euselasia eutychus*	(Hewitson, 1856)		●	
27	*Euselasia hahneli*	Staudinger, [1887]		●	
28	*Euselasia gyda*	Hewitson, 1859		●	
29	*Euselasia hygenius*	(Stoll, 1787)		●	
30	*Euselasia ignitis*	Stichel, 1924		●	
31	*Euselasia issoria*	(Hewitson, 1869)		●	
32	*Euselasia kartopus*	Stichel, 1919			●
33	*Euselasia labdacus*	(Stoll, 1780)		●	
34	*Euselasia matuta*	(Schaus, 1913)		●	
35	*Euselasia melaphaea*	(Hübner, 1823)		●	
36	*Euselasia midas*	Seitz, 1916		●	
37	*Euselasia mirania*	(H. Bates, 1868)		●	
38	*Euselasia mys*	(Herrich-Schäffer, [1853])		●	
39	*Euselasia opalescens*	(Hewitson, [1855])		●	
40	*Euselasia orba spectralis*	Stichel, 1919		●	
41	*Euselasia pelor*	(Hewitson, [1853])		●	
42	*Euselasia toppini*	Sharpe, 1915		●	
43	*Euselasia teleclus*	(Stoll, 1787)		●	
44	*Euselasia uria*	Hewitson, 1854		●	
45	*Euselasia urites*	(Hewitson, [1853])		●	
46	*Euselasia uzita*	(Hewitson, [1853])		●	
47	*Euselasia venezolana*	Seitz, 1913		●	
48	*Methone cecilia*	(Cramer, 1777)		●	
49	*Hades noctula*	Westwood, 1851		●	

			Distribution (m)		
Riodinidae Grote, 1895			>500	500-900	900+
Subfamily ***Riodininae***					
Tribe ***Mesosemiini*** Bates, 1859					
Subtribe ***Mesosemiina***					
50	*Eunogyra satyrus*	Westwood, 1851		•	
51	*Teratophthalma maenades*	(Hewitson, 1858)		•	
52	*Teratophthalma phelina*	(Felder &Felder, 1862)		•	
53	*Mesosemia cippus*	Hewitson, 1859		•	
54	*Mesosemia gertraudis*	Stichel, 1910		•	
55	*Mesosemia gneris*	Westwood, 1851		•	
56	*Mesosemia ibycus*	Hewitson, 1859		•	
57	*Mesosemia impedita*	Hewitson, 1859		•	
58	*Mesosemia isshia*	A. Butler, 1869		•	
59	*Mesosemia judicialis*	A. Butler, 1874		•	
60	*Mesosemia loruhama*	Hewitson, 1869		•	
61	*Mesosemia machaera*	Hewitson, 1860		•	
62	*Mesosemia maeotis*	Hewitson, 1859		•	
63	*Mesosemia menoetes*	Hewitson, 1860		•	
64	*Mesosemia methion*	Hewitson, 1860		•	
65	*Mesosemia metura*	Hewitson, [1873]		•	
66	*Mesosemia mevania*	Hewitson, [1857]		•	
67	*Mesosemia misipsa*	Hewitson, 1859		•	
68	*Mesosemia nyctea*	(Hoffmannsegg, 1818)	•		
69	*Mesosemia nr. sirenia*			•	
70	*Mesosemia nr. sylvina*			•	
71	*Mesosemia olivencia*	H. Bates, 1868		•	
72	*Mesosemia philocles jeziela*	A. Butler, 1869		•	
73	*Mesosemia sp.*			•	
74	*Mesosemia steli*	Hewitson, 1858		•	
75	*Mesosemia synnephis*	Stichel, 1909		•	
76	*Mesosemia telegone*	(Boisduval, 1836)		•	
77	*Mesosemia thera*	Godman, 1903		•	
78	*Mesosemia thymetus*	A. Butler, 1869		•	

			Distribution (m)		
Riodinidae Grote, 1895			>500	500-900	900+
79	*Mesosemia ulrica*	(Cramer, 1777)		●	
80	*Mesosemia cf. walteri*	Brévignon, 1998		●	
81	*Mesosemia zanoa orthia*	Hewitson, 1869		●	
82	*Leucochimona anophthalma*	(Felder & Felder, 1865)		●	
83	*Leucochimona icare*	Hübner, [1819])		●	
84	*Leucochimona i. matatha*	(Hewitson, 1873)		●	●
85	*Leucochimona lagora*	(Herrich-Schäffer, [1853])		●	
86	*Leucochimona molina*	(Godman & Salvin, 1885)		●	
87	*Leucochimona vestalis*	(H. Bates, 1865)		●	
88	*Peropthalma tullius*	(Fabricius, 1787)		●	
89	*Mesophthalma idotea*	Westwood, 1851		●	
90	*Semomesia croesus*	(Fabricius, 1776)		●	
	Subtribe **Napaeina**				
91	*Ithomiola floralis*	C. Felder & R. Felder, 1865		●	
92	*Ithomiola nepos*	J.C. Fabricius, 1793		●	
93	*Hyphilaria nicia*	Hübner, [1819]		●	
94	*Hyphilaria parthensis*	(Westwood, 1851)		●	
95	*Hyphilaria thasus*	(Stoll, 1780)		●	
96	*Napaea actoris*	(Cramer, 1776)		●	
97	*Napaea beltiana*	(H. Druce, 1904)		●	
98	*Napaea eucharila*	(H. Bates, 1867)		●	
99	*Napaea melampia*	(H. Bates, 1867)		●	
Tribe **Eurybiini** Reuter, 1897					
100	*Eurybia albiseriata*	Weymer, 1890		●	
101	*Eurybia caerulescens*	H. Druce, 1904		●	
102	*Eurybia dardus annulata*	Stichel, 1910		●	
103	*Eurybia elvina*	Stichel, 1910		●	
104	*Eurybia halimede*	(Hübner, [1807])		●	
105	*Eurybia molochina hyacinthinia*	Stichel, 1910		●	
106	*Eurybia sp. fm cannio*			●	

			Distribution (m)		
Riodinidae Grote, 1895			>500	500-900	900+
107	*Eurybia juturna*	C. Felder & R. Felder, 1865		●	
108	*Eurybia latifasciata*	(Hewitson, 1869)		●	
109	*Eurybia nicaeus nicaeus*	(Fabricius, 1775)		●	
110	*Eurybia patrona*	Weymer, 1875		●	
111	*Eurybia rubeolata*	Stichel, 1910		●	
112	*Eurybia silaceana*	Stichel, 1924		●	
113	*Alesa amesis*	(Cramer, 1777)		●	
114	*Alesa lipara*	H. Bates, 1867		●	
115	*Alesa prema*	(Godart, [1824])		●	
Tribe **Riodinini** Grote, 1895					
116	*Lyropteryx apollonia*	Westwood, 1851		●	
117	*Lyropteryx terpsichore*	Westwood, 1851	●	●	
118	*Necyria bellona juturna*	Hewitson, 1869		●	●
119	*Necyria duellona*	Westwood, 1851		●	●
120	*Cyrenia martia*	Westwood, 1851		●	
121	*Ancyluris aulestes*	(Cramer, 1777)		●	
122	*Ancyluris inca*	Felder &Felder, 1865)			●
123	*Ancyluris etias*	(Saunders, 1859)		●	
124	*Ancyluris formosissima*	(Hewitson, 1870)		●	●
125	*Ancyluris meliboeus*	(Fabricius, 1776)		●	
126	*Ancyluris mira*	(Hewitson, 1874)		●	
127	*Ancyluris tedea*	(Cramer, 1777)		●	
128	*Rhetus arcius*	(Linnaeus, 1763)		●	
129	*Rhetus dysoni*	(Saunders, 1850)		●	●
130	*Rhetus periander*	(Cramer, 1777)		●	
131	*Chorinea bogota*	(Saunders, 1859)		●	
132	*Ithomeis aurantiaca*	H. Bates, 1862		●	
133	*Panara phereclus*	(Linnaeus, 1758)		●	
134	*Isapis agyrtus*	(Cramer, 1777)		●	
135	*Brachyglenis esthema*	C. Felder & R. Felder, 1862		●	
136	*Notheme erota*	(Cramer, 1780)		●	

			Distribution (m)		
Riodinidae Grote, 1895			>500	500-900	900+
137	*Monethe albertus*	C. Felder & R. Felder, 1862		•	
138	*Colaciticus johnstoni*	(Dannatt, 1904)		•	
139	*Chalodeta chaonitis*	(Hewitson, 1866)		•	
140	*Chalodeta lypera*	(H. Bates, 1868)		•	
141	*Datchetola sp.*			•	
142	*Metacharis lucius*	(Fabricius, 1793)		•	
143	*Metacharis regalis*	A. Butler, 1867		•	
144	*Metacharis syloes*	Hewitson, 1877		•	
145	*Metacharis victrix*	(Hewitson, 1870)		•	
146	*Pheles atricolor*	(A. Butler, 1871)		•	
147	*Pheles bicolor*	(Godman & Salvin, 1886)		•	
148	*Pheles eulesca*	(Dyar, 1909)		•	
149	*Pheles incerta*	Staudinger, [1887]			•
150	*Pheles strigosa*	(Staudinger, 1876)		•	
151	*Syrmatia lamia*	H. Bates, 1868		•	
152	*Chamaelimnas briola*	H. Bates, 1868		•	
153	*Chamaelimnas cydonia*	Stichel, 1910			
154	*Detritivora ma*	(Harvey & J. Hall, 2002)		•	
155	*Detritivora matic*	(Harvey & J. Hall, 2002)		•	
156	*Charis anius*	(Cramer, 1776)		•	
157	*Parcella amarynthina*	(Felder &Felder, 1865)		•	
158	*Caria rhacotis*	(Godman & Salvin, 1878)			•
159	*Calephelis candiope*	(H. Druce, 1904)		•	
160	*Calephelis laverna*	(Godman & Salvin, 1886)		•	
161	*Calephelis velutina*	(Godman & Salvin, 1878)		•	
162	*Crocozona coecias*	(Godman, 1903)		•	
163	*Baeotis hisbon*	(Cramer. 1775)		•	
164	*Lasaia aerugo*	Clench, 1972		•	
165	*Lasaia agesilas*	(Latreille, [1809])		•	
166	*Lasaia arsis*	Staudinger, [1887]		•	
167	*Lasaia meris*	(Stoll, 1781)		•	
168	*Amarynthis meneria*	(Cramer, 1776)		•	

			Distribution (m)		
Riodinidae Grote, 1895			>500	500-900	900+
169	*Exoplisia cadmeis*	(Hewitson, 1866)		●	
170	*Riodina lysippus*	(Linnaeus, 1758)		●	
171	*Melanis electron pronos-triga*	(Stichel, 1910)		●	
172	*Melanis marathon*	(Felder &Felder, 1865)		●	
173	*Melanis pasiena*	(Hewitson, 1870)		●	
174	*Melanis smithiae xarifa*	(Hewitson, [1853])		●	
175	*Siseme alectryo spectandra*	Stichel, 1909			●
176	*Siseme aristoteles*	C. Felder & R. Felder, 1865		●	
177	*Siseme pallas*	(Latreille, [1809])		●	
178	*"Siseme" pedias*	Godman, 1903		●	
Tribe **Symmachiini** Bates, 1859					
179	*Mesene epaphus pyrrha*	H. Bates, 1868		●	
180	*Mesene fissurata*	Stichel, 1929		●	
181	*Mesene leucophrys*	H. Bates, 1868		●	
182	*Mesene margaretta*	(A. White, 1843)		●	
183	*Mesene monostigma discolor*	Stichel, 1929		●	
184	*Mesene monostigma =hya*	(Erichson, [1849])		●	
185	*Mesene nepticula*	Stichel, 1910		●	
186	*Mesene nola euteryx*	H. Bates, 1868		●	
187	*Mesene paraena*	H. Bates, 1868	●		
188	*Mesene philonis*	Hewitson, 1874	●		
189	*Mesene silaris*	Godman & Salvin, 1878		●	
190	*Mesene sp. 1*			●	
191	*Mesene sp. 2*			●	
192	*Mesene sp. 3*			●	
193	*Mesene sp. 4*			●	
194	*Xenandra pelopia*	(H. Druce, 1890)		●	
195	*Xynias lithosina*	(H. Bates, 1868)		●	
196	*Esthemopsis cf. pallida*	Lathy, 1932		●	
197	*Esthemopsis pherephatte*	(Godart, [1824])		●	
198	*Esthemopsis sericina*	(H. Bates, 1867)		●	

			Distribution (m)		
Riodinidae Grote, 1895			>500	500-900	900+
199	*Chimastrum celina*	(H. Bates, 1868)		●	
200	*Symmachia basilissa*	(H. Bates, 1868)		●	
201	*Symmachia accusatrix*	Westwood, 1851		●	
202	*Symmachia falcistriga*	Stichel, 1910		●	
203	*Symmachia hippea*	Herrich-Schäffer, [1853]		●	
204	*Symmachia probetor*	(Stoll, 1782)		●	
205	*Symmachia rubina*	H. Bates, 1866		●	
206	*Symmachia tricolor*	Hewitson, 1867		●	
207	*Pirascca tyriotes*	(Godman & Salvin, 1878)		●	
208	*Panaropsis thyatira*	(Hewitson, [1853])		●	
Tribe **Helicopini** Reuter 1897					
209	*Helicopis cupido*	(Linnaeus, 1758)	●		
210	*Sarota chrysus*	(Stoll, 1781)		●	
211	*Sarota lasciva*	(Stichel, 1911)		●	
212	*Sarota gyas*	(Cramer, 1775)		●	
213	*Sarota miranda*	Brévignon, 1998		●	
214	*Anteros acheus*	(Stoll, 1781)		●	
215	*Anteros bracteata*	Hewitson, 1867		●	
216	*Anteros formosus*	(Cramer, 1777)		●	
217	*Calydna caieta*	Hewitson, 1854	●		
218	*Calydna candace*	Hewitson, 1859	●		
219	*Calydna catana*	Hewitson, 1859	●		
Tribe	**Incertae sedis**				
220	*Emesis adelpha*	Le Cerf, 1958		●	
221	*Emesis aurimna*	(Boisduval, 1870)		●	
222	*Emesis castigata*	Stichel, 1910		●	
223	*Emesis cerea*	(Linnaeus, 1767)		●	
224	*Emesis condigna*	Stichel, 1925		●	
225	*Emesis cypria*	C. Felder & R. Felder, 1861		●	
226	*Emesis fatimella*	Westwood, 1851		●	●

			Distribution (m)		
Riodinidae Grote, 1895			>500	500-900	900+
227	*Emesis lucinda*	(Cramer, 1775)		•	
228	*Emesis lupina*	Stichel, 1916		•	
229	*Emesis mandana*	(Cramer, 1780)		•	
230	*Emesis ocypore*	H. Bates, 1868		•	
231	*Emesis spreta*	H. Bates, 1868		•	
232	*Emesis temesa*	(Hewitson, 1870)		•	
233	*Argyrogrammana physis*	(Stichel, 1911)		•	
234	*Argyrogrammana stilbe*	(Godman & Salvin, 1878)		•	
235	*Argyrogrammana sublimis*	Brevignon & Gallard, 1995		•	
236	*Pachythone xanthe*	H. Bates, 1868		•	
237	*Callistium cleadas*	(Hewitson, 1866)		•	
238	*Comphotis sophistes*	(H. Bates, 1868)		•	
Tribe **Nymphidiini** Bates, 1859					
	Subtribe **Lemoniadina**				
239	*Aricoris erostratus*	(Westwood, 1851)	•		
240	*Lemonias egaensis*	(A. Butler, 1867)		•	
241	*Lemonias zygia*	Hübner, [1807]		•	
242	*Thisbe irenea*	(Stoll, 1780)		•	
243	*Thisbe hyalina*	(A. Butler, 1867)		•	
244	*Thisbe molela*	(Hewitson, 1865)	•		
245	*Juditha azan*	(Lathy, 1904)		•	
246	*Juditha molpe*	(Hübner, [1808])		•	
247	*Synargis agle*	(Hewitson, [1853])		•	
248	*Synargis ochra*	(H. Bates, 1868)		•	
249	*Synargis orestessa*	Hübner, [1819]		•	
250	*Synargis phliassus*	(Clerck, 1764)		•	
251	*Synargis pittheus*	(Hoffmannsegg, 1818)	•		
252	*Synargis tytia*	(Cramer, 1777)		•	
253	*Synargus abaris*	(Cramer, 1776)		•	
254	*Synargis calyce*	(Felder &Felder, 1862)		•	
255	*Synargis* sp. n.			•	

			Distribution (m)		
Riodinidae Grote, 1895			>500	500-900	900+
	Subtribe **Nymphidiina**				
256	*Menander hebrus*	(Cramer, 1775)		•	
257	*Menander menander*	(Stoll, 1780)		•	
258	*Menander pretus picta*	(Godman & Salvin, 1886)		•	
259	*Zelotaea sp.*			•	
260	*Pandemos pasiphae*	(Cramer, 1775)		•	
261	*Calospila emylius*	(Cramer, 1775)		•	
262	*Calospila latona*	(Hewitson, 1853)		•	
263	*Calospila lucianus*	(Stichel, 1910		•	
264	*Calospila* n. sp.			•	
265	*Calospila parthaon*	Dalman, 1823)		•	
266	*Calospila pirene*	(Godman, 1903)		•	
267	*Calospila rhodope*	(Hewitson, 1853)		•	
268	*Calospila siaka*	(Hewitson, [1858])		•	
269	*Calospila thara*	(Hewitson, 1858)	•		
270	*Adelotypa curulis*	(Hewitson, 1874)			•
271	*Livendula leucocyana*	(Geyer, 1837)		•	
272	*Livendula leucophaea*	(Hübner, [1821])		•	
273	*Setabis epitus*	(Cramer, 1780)		•	
274	*Setabis heliodora*	(Staudinger, [1887])		•	
275	*Setabis lagus*	(Cramer, 1777)		•	
276	*Setabis myrtis*	(Westwood, 1851)		•	
277	*Setabis phaedon*	(Godman, 1903)	•		
278	*Setabis pythioides*	(A. Butler, 1867)		•	
279	*Nymphidium ariari*	C. Callaghan, 1988		•	
280	*Nymphidium ascolia*	Hewitson, [1853]		•	
281	*Nymphidium azanoides*	A. Butler, 1867		•	
282	*Nymphidium baeotia*	Hewitson, [1853]		•	
283	*Nymphidium caricae*	Stichel, 1924		•	
284	*Nymphidium carmentis*	Stichel, 1910		•	
285	*Nymphidium derufata*	Callaghan, 1985		•	

			Distribution (m)		
Riodinidae Grote, 1895			>500	500-900	900+
286	*Nymphidium leucosia*	Stichel, 1924		●	
287	*Nymphidium lisimon*	(Stoll, 1790)		●	
288	*Nymphidium mantus*	(Cramer, 1775)		●	
289	*Nymphidium ninias*	Hewitson, 1865	●		
290	*Nymphidium omois*	Hewitson, 1865		●	
291	*Nymphidium trinidadi*	Callaghan, 1999		●	
292	*Mycastor neacles*	(Hewitson, 1871)		●	
	Subtribe **Theopina**				
293	*Protonymphidia senta*	(Hewitson, 1853)		●	
294	*Theope (Parnes) nycteis*	(Westwood, 1851)		●	
295	*Theope (Parnes) philotes*	(Westwood, 1851)		●	
296	*Theope acosma*	Stichel, 1910		●	
297	*Theope archimedes*	D'Abrera, 1994		●	
298	*Theope atima*	H. Bates, 1868		●	
299	*Theope azurea*	Bates, 1868		●	
300	*Theope bacenis*	Schaus, 1890		●	
301	*Theope barea*	Godman & Salvin, 1878		●	
302	*Theope discus*	H. Bates, 1868		●	
303	*Theope eudocia*	Westwood, 1851		●	
304	*Theope excelsa*	H. Bates, 1868		●	
305	*Theope foliorum*	H. Bates, 1868		●	
306	*Theope pedias*	Herrich-Schäffer, [1853]		●	
307	*Theope leucanthe*	H. Bates, 1868		●	
308	*Theope mundula*	Stichel, 1926		●	
309	*Theope pieridoides*	C. Felder & R. Felder, 1865		●	
310	*Theope sobrina*	H. Bates, 1868		●	
311	*Theope terambus*	(Godart, [1824])		●	
312	*Theope theritas*	Hewitson, 1860		●	
313	*Theope thestias*	Hewitson, 1860		●	
314	*Theope thootes*	Hewitson, 1860		●	
315	*Theope virgilius*	(Fabricius, 1793)		●	

			Distribution (m)		
Riodinidae Grote, 1895			>500	500-900	900+
Tribe **Stalachtini**					
316	*Stalachtis calliope*	(Linnaeus, 1758)		•	
317	*Stalachtis phlegia*	(Cramer, 1779)		•	

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