

# Taxonomic Notes on Ctenuchina, Euchromiina, and Phaegopterina (Lepidoptera, Erebidae, Arctiinae, Arctiini)

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# TAXONOMIC NOTES ON CTENUCHINA, EUCHROMIINA, AND PHAEGOPTERINA (LEPIDOPTERA, EREBIDAE, ARCTIINAE, ARCTIINI)

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# Abstract

Taxonomic notes on specific and generic names of Ctenuchina, Euchromiina, and Phaegopterina are provided. Five **new synonymies** are established: *Cercopimorpha complexa* Gaede (= *Neacerea tetilla* Dognin), *Episcepsis scintillans* Rothschild (= *Heliura luctuosa* Möschler), *Eucereon theophanes* Schaus (= *Eucereon metoidesis* Hampson), *Delphyre leucomela* Kaye (= *Teucer apicalis* Rothschild), and *Cosmosoma albipuncta* (= *Cosmosoma harpalyce* Schaus). We also propose the following nomenclatural changes: *Ecdemus carmania* (Druce) **new combination**, *Episcepsis luctuosa* (Möschler) **new combination**, and *Pseudopharus nigra* (Schaus) **new combination**. Additionally, **lectotypes** are designated for *Neacerea tetilla* Dognin, *Pezaptera carmania* Druce, *Eucereon theophanes* Schaus *Delphyre leucomela* Kaye, and *Cosmosoma harpalyce* Schaus.

Key Words: taxonomy, new synonym, new combination, lectotype

#### Resumo

Notas taxonômicas de nomes genéricos e específicos de Ctenuchina, Euchromiina e Phaegopterina são fornecidos. Cinco **sinônimos novos** são propostos: Cercopimorpha complexa Gaede (= Neacerea tetilla Dognin), Episcepsis scintillans Rothschild (= Heliura luctuosa Möschler), Eucereon theophanes Schaus (= Eucereon metoidesis Hampson), Delphyre leucomela Kaye (= Teucer apicalis Rothschild), e Cosmosoma albipuncta (= Cosmosoma harpalyce Schaus). Também são propostas as seguintes mudanças nomenclaturais: Eccdemus carmania (Druce) **combinação nova**, Episcepsis luctuosa (Möschler) **combinação nova** e Pseudopharus nigra (Schaus) **combinação nova**. Adicionalmente, **lectótipos** são designados para Neacerea tetilla Dognin, Pezaptera carmania Druce, Eucereon theophanes Schaus Delphyre leucomela Kaye e Cosmosoma harpalyce Schaus.

Palavras-Chave: taxonomia, sinônimo novo, combinação nova, lectótipo

Arctiinae is distributed worldwide, with around 11,000 described species, of which 6,000 inhabit the Neotropics (Watson & Goodger 1986). The current classification (Jacobson & Weller 2002) divides the subfamily into 3 tribes: Lithosiini, Syntomini, and Arctiini. This study is concerned with taxa belonging to 3 of the 5 subtribes of the Arctiini, i.e., Ctenuchina, Euchromiina, and Phaegopterina.

Ctenuchina and Euchromiina have always been considered closely related, with few exceptions. Kirby (1892), for example, considered that Euchromiinae belonged in Zygaenidae, and Ctenuchinae in Arctiidae. The first descriptions of species of these groups date from the very beginning of lepidopteran taxonomy, when few genera of moths were defined. Hence they were placed together with species that are now classified in Sphingidae, Sesiidae, and Zygaenidae, for example. Later, species that now belong to Ctenuchina and Euchromiina were considered together with the current concept of Zygaenidae because of the overall similarity of the habitus. Herrich-Schäffer (1845) separated Zygaenidae from the Syntomidae, as understood at that time (which included Ctenuchina, Euchromiina, plus the Old World Syntomini, all of which are currently classified in Arctiinae). The concept of Syntomini as a separate taxon from Ctenuchina plus Euchromiina was first proposed by Forbes (1939), who separated what he termed Euchromiidae into Amatinae (= Syntomini), Euchromiina, and Ctenuchina. This scheme was later defended in the classification proposed by Jacobson & Weller (2002).

Together, Ctenuchina and Euchromiina now comprise around 3,000 valid species (Simmons et al. 2012), which occur from Argentina to the southern United States. The current usage of Euchromiina and Ctenuchina follows the formalization by Forbes (1939, 1960) of the diagram of phylogenetic relationships conceived by Hampson (1898). The literature on these groups is composed mainly of species descriptions. Only a few revisions exist (e.g., Field 1975; Dietz & Duckworth 1976; Travassos 1952; Simmons & Weller 2006; Pinheiro & Duarte 2010), with a similarly small number of faunal surveys (e.g., Aguila 2004; Biezanko 1983; Grados 2002; Hernández-Baz & Grados 2004; Cerda 2008; Ferro & Teston 2009; Ferro et al. 2012), and scattered notes on morphology (e.g., Barth 1953; Forbes & Franclemont 1957) and ecology (e.g., Conner 1999; Conner et al. 2000).

Phaegopterina is almost exclusive to the New World, with nearly 1,600 species in the Neotropics (Watson & Goodger 1986); it is the second-largest group within Arctiini, after Arctiina (Weller et al. 2008). The group was created by Kirby (1892) as a subfamily of Arctiidae, in an arrangement that differs considerably from the current one. Hampson (1901) did not recognize the Phaegopterinae, listing most of its genera in his Arctiadae (which is more or less equivalent to Arctiina in the current classification). Draudt (1920-1922) reinstated Phaegopterinae, with a definition very close to that used today.

The studies of Luh (1937), Forbes (1939, 1960), and Forbes & Franclemont (1957) provide the basis for the only tentative groupings existing within Phaegopterina, namely the Eupseudosoma, Halysidota, Euchaetes, and Belemnia groups. Forbes (1939) assigned tribal status to the latter, for he considered them to be a "transitional" group between what he called Phaegopterinae and Ctenuchinae. Jacobson & Weller (2002) concluded that Phaegopterina is paraphyletic, and that in a strict sense, this group seems to be a sister clade of Euchromiina + Ctenuchina. However, the low number of representatives of phaegopterines available to Jacobson & Weller (op. cit.) prevented them from reaching a conclusion on the validity of the above-mentioned groups within the subtribe. The only work dealing with Forbes' groups of genera is that of DaCosta et al. (2006), with the *Euchaetes* complex.

Although the majority of the species of Ctenuchina, Euchromiina, and Phaegopterina occur in the Neotropics, the available information is strongly biased toward taxa from other biogeographical regions, mainly the Holarctic and Nearctic. The purpose of this paper is to contribute to the straightening out of the taxonomic chaos of these groups, the basic step needed to encourage further studies on these moths.

# MATERIALS AND METHODS

The new synonymies here established are based on the study of the types. The names are arranged alphabetically according to their current classification, following the generic arrangement of the latest catalogues available for each group (Draudt 1915-1917; Watson & Goodger 1986).

The following acronyms are used: (BMNH) Natural History Museum, London, UK; (MNHN) Muséum national d'Histoire naturelle, Paris, France; (MTD) Senckenberg Naturhistorische Sammlungen Dresden, Museum für Tierkunde, Dresden, Germany; (SMF) Senckenberg Forschungsinstitut und Naturmuseum, Frankfurt-am-Main, Germany; (USNM) National Museum of Natural History, Smithsonian Institution, Washington, D.C., USA; (ZMHB) Museum für Naturkunde der Humboldt-Universität, Berlin, Germany. The dates of older references follow Heppner (1982). Lectotype designations are made where appropriate, to ensure stability of the names. Illustrations are provided to aid visualization of the changes here proposed. Label information is transcribed in separate quotes for each label.

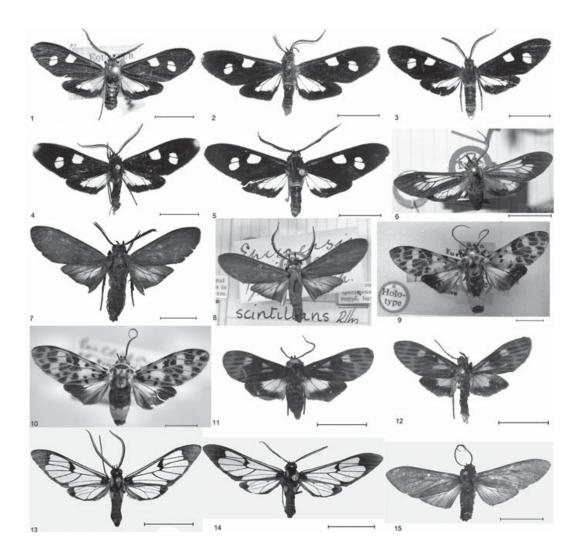
# RESULTS AND DISCUSSION

Supplementary material for this article in Florida Entomologist 96(2) (2013), which shows Figs. 1-15 in color, is online at http://purl.fcla.edu/fcla/entomologist/browse

# CTENUCHINA

Delphyre tetilla (Dognin, 1898) (Fig. 1)

- Neacerea tetilla Dognin, 1898: 344. Lectotype hereby designated male: ECUADOR. With 7 labels: 4 printed "Type No. 30774 U.S.N.M."; "Equateur, C. de Labonnefon"; "Dognin collection"; and "Kb-Dia-Nr. 1554 Kreusel dok.", and 3 handwritten "Neacerea tetilla type ♂ Dgn."; "not in B.M."; and "Neacerea sp not in B.M. Hampson." (USNM) [examined].
- Delphyre tetilla; Zerny, 1912: 136; Hampson, 1915: pl. 17, fig. 5; Draudt, 1915: 167, pl. 24 row e.
- Delphyre tetilla coerulescens Dognin, 1919: 4. Holotype male, by monotypy: COLOMBIA, Espinal, March 1918, Apolinaire-Marie. (USNM) [examined].
- Neacerea elegans Lathy, 1899: 119. Holotype male, by evidence of monotypy: ECUADOR, Baños, with 5 labels ""Type"; "Banos"; "3"; "Neacerea elegans Lathy specimen typicum"; and "Adams Bequest B. M. 1912-399" (BMNH) [examined]. Synonymized by Hampson, 1914: 299.



Figs. 1-15. Photographs of the types of the names treated here. 1. Lectotype of *Neacerea tetilla* Dognin. 2. Holotype of *Neacerea elegans* Lathy. 3. Holotype of *Heliura bimaculata* Rothschild. 4. Syntype of *Napata boettgeri* Druce. 5. Holotype of *Cercopimorpha complexa* Gaede. 6. Lectotype of *Pezaptera carmania* Druce. 7. Holotype of *Heliura luctuosa* Möschler. 8. Holotype of *Episcepsis scintillans* Rothschild. 9. Holotype of *Eucereon metoidesis* Hampson. 10. Lectotype of *Eucereon theophanes* Schaus. 11. Lectotype of *Teucer apicalis* Rothschild. 12. Lectotype of *Delphyre leucomela* Kaye. 13. Lectotype of *Cosmosoma harpalyce* Schaus. 14. Holotype of *Cosmosoma albipuncta* Gaede. 15. Holotype of *Neacerea nigra* Schaus. Scale bar = 1 cm.

#### Delphyre elegans; Zerny, 1912: 135.

# Heliura bimaculata Rothschild, 1912: 167. Holotype male, by evidence of monotypy: [COLOMBIA], Bogotá, 1898, with 4 labels "Bogota coll. 1898"; "Type"; "Heliura bimaculata tipo Rothsch."; and "Rothschild Bequest B. M. 1939-1" (BMNH) [examined]. Synonymized by Hampson, 1914: 299.

Cercopimorpha complexa Gaede, 1926: 128. Holotype male, by monotypy. PERU, Marcapoto [Marcapata], coll. Staudinger. (ZMHB) [examined]. New synonym.

#### Remarks

*Neacerea tetilla* was described from 4 males. We have compared all these specimens and confirm that they are conspecific. The specimen illustrated in Fig. 1 is here designated the lectotype, and the others henceforth are to be considered paralectotypes. *Delphyre tetilla coerulescens* was described as a variety, but according to article 45.6.4 of the ICZN (1999), it is to be considered a subspecies. Although no data are available to support this status, it is left as such due to lack of information to determine whether it is merely a variation.

Neacerea elegans (Fig. 2) was described from an unspecified number of males. The ICZN (1999) is unclear on how to deal with cases such as this. given that article 73.1.2 allows external evidence to be taken into account in the determination of the type series, but article 72.4.7 states that a label is not necessarily evidence that the particular specimen that bears it is a type. Therefore we decided to consider the above-mentioned specimen as a holotype, based on the following facts: (i) all types of names described by Lathy are presumed to be held in the BMNH; (ii) this institution has a renowned history of good maintenance of its collections; (iii) the first author made a thorough search for specimens of the genus *Delphyre* in the BMNH; (iv) the above-mentioned specimen was the only one found with a label corresponding to the data provided in the original description, and the label saying "specimen typicum" is handwritten, presumably by Lathy; (v) we found another case of a name proposed by Lathy (Heliura suffusa Lathy, 1899) for which there are 2 specimens bearing labels with this same handwriting, one labelled "specimen typicum" and the other "paratype"; we believe that this suggests that Lathy intended to designate holotypes.

*Heliura bimaculata* (Fig. 3) was also described from an unknown number of males. The same argument used for *Ne. elegans* is used to advance the opinion that *H. bimaculata* has a holotype, and not a syntype.

Another species closely allied to *D. tetilla* could also be its synonym: *Napata boettgeri* Druce, 1909 (Fig. 4), currently placed in *Delphyre*. The only difference observed between the types of *Na. boettgeri* and *Ne. tetilla* is the forewing apex, which has more white in the former. Dognin (1919) regarded it as a variety of *D. tetilla*, but in our opinion, type dissections are required to substantiate this hypothesis. In case they are not synonymous, it might be worth investigating the synonymization of *Ne. elegans* as well, given that its forewings have the same white markings as *Na. boettgeri*. This is not the case with *C. complexa* (Fig. 5), which has forewings like those of *D. tetilla*.

Delphyre was described in the "Tribe Bomporcites, Family Lithosiides" by Walker (1854), the same group in which he included several genera now placed in Ctenuchina, such as *Ctenucha* Kirby, 1837 (type genus of Ctenuchina), as well as some Pericopina, some Dioptinae, and of course, many Lithosiini. Kirby (1892) treated the genus in his "Lithosiidae" with only the type species included. The genus was not mentioned in the "Syntomidae" catalogue of Hampson (1898), but in the supplement to this work (Hampson 1914), he considered *Delphyre* as a senior subjective synonym of *Neacerea* Hampson, 1898 [Dec.], a junior homonym of *Neacerea* Druce, 1898 [May] (the name probably originated from Hampson but was made available 7 months earlier by Druce; the type species of both concepts are currently considered to be congeneric). Hampson may have taken this decision because *Neacerea brunnea* Druce, 1898, a species that he included in *Neacerea* in the 1898 catalogue, is very similar to *Delphyre hebes* Walker, 1854 (type species of *Delphyre* Walker).

*Delphyre* has never been revised, and includes 44 valid specific names and 3 generic synonyms: Nodoza Schaus, 1896a, Neacerea Hampson, 1898, and Neacerea Druce, 1898. The type species of Delphyre and Nodoza are remarkably similar (in fact, Nodoza tristis Schaus, 1896a is a junior subjective synonym of D. hebes), and both are quite distinct from the type species of *Neacerea* Druce, N. albiventus Druce, 1898. Although Neacerea is probably a valid genus, its revalidation awaits an examination to determine which species belong to it. However, many other species are most likely misplaced in *Delphyre*, not to mention the possibility that the type species of the genus does not belong to Ctenuchina (L. R. Pinheiro, personal observation).

*Ecdemus carmania* (Druce, 1883), **new combination** (Fig. 6)

- Pezaptera carmania Druce, 1883: 379. Lectotype male, hereby designated: ECUADOR, Sarayacu. With 5 labels: "Type H.T."; "Presented by J. J. Joicey Esq. Brit. Mus. 1931-444"; "Pezaptera carmania type Druce"; "Sarayacu, Ecuador, C. Buckley"; and "Kb-Dia-Nr. 783 B. Kreusel dok." (BMNH) [examined]; Kirby, 1892: 153.
- Teucer carmania; Hampson, 1898: 382, fig. 190; Zerny, 1912: 111; Draudt, 1915: 128, pl. 20 row a.

# Remarks

*Pezaptera carmania* was described from an unspecified number of specimens. Only one was found at the BMNH, with labels according to the original description (it has a red type label). Although Druce provided a measurement in the original description, this should not be regarded as evidence of monotypy, because it is known (L. R. Pinheiro, personal observation) that this author often gave a single measurement for names described from more than one specimen. Consequently, in the absence of any evidence of monotypy it is safer to regard this specimen as the only known syntype (ICZN 1999, recommendation 73F), here designated as a lectotype.

Druce (1883) considered *P. carmania* allied to *Pezaptera sordida* (Walker, 1856). Apparently Hampson (1898) did not agree, because he transferred the former taxon to *Teucer* Kirby, 1892 (an unnecessary replacement name for *Telioneura* Felder, 1869), where it has remained to the present date. The type species of *Pezaptera* Butler, 1876a and *Telioneura, Eunomia sordida* Walker, 1856 and *T. glaucopis* Felder, 1874, respectively, were examined, but they do not seem to be particularly close to *P. carmania*. On the other hand, we noted that *P. carmania* strikingly resembles the type species of *Ecdemus*, *E. hypoleucus* Herrich-Schäffer, 1855.

The transfer of *P. carmania* to *Ecdemus* Herrich-Schäffer, [1855] is supported by external characters shared with its type species, *E. hypoleucus* Herrich-Schäffer [1855], such as the wing venation and pattern of scaling on forewings (the type of *E. hypoleucus* was not examined, but it was illustrated by Hampson, 1898, Fig. 185 and Draudt, 1915, Plate 19 row k). Although no hypothesis of monophyly has been advanced for this genus and none is proposed here, the resemblance of these 2 species and the lack of characters supporting a close relationship of *E. carmania* and *Telioneura glaucopis* are considered valid reasons to justify the transfer.

Most of the remaining species that are currently placed in *Telioneura* are as dissimilar from their type species as is *E. carmania*. But even though it is a small genus with only 11 species, a proper revision is needed to determine the correct placement of the other species that apparently do not belong to *Telioneura*. On the other hand, *Ecdemus* is composed of 4 other species that share very similar features, and it could be one of the few monophyletic genera in Ctenuchina.

*Episcepsis luctuosa* (Möschler, 1877), **new combination** (Fig. 7)

- Heliura luctuosa Möschler, 1877: 642, pl. 8, fig. 13. Holotype male, by monotypy: SURINAME, Paramaribo. (ZMHB) [examined]; Kirby, 1892: 165.
- Hyaleucerea luctuosa; Hampson, 1898: 543. Draudt, 1915: 194.
- Episcepsis scintillans Rothschild, 1911: 44. Holotype male, by original designation: BRAZIL, Rio Madeira, Allianca, below San Antonio, November-December 1907 (W. Hoffmanns) (BMNH) [examined]; Draudt, 1915: 131, pl. 20 row d. New synonym. (Fig. 8)

# Remarks

*Episcepsis scintillans* was described based on 32 males from 6 different localities in Venezuela, Suriname, and northern Brazil. One male from Aliança (Allianca) was regarded by the author as "the type." The only specimen with a red holotype label and a label with Rothschild's handwriting is here considered the holotype, following the line of reasoning described above.

Hyaleucerea luctuosa was originally described in Heliura Butler, 1876b, perhaps because it bears hindwing androconia similar to those that are present in other species of Heliura (for example, H. tetragramma (Walker, 1854)). The transfer of H. luctuosa to Hyaleucerea Butler, 1875 by Hampson (1898) was probably based solely on wing venation (a customary practice at that time), given that neither the type species of this genus, Glaucopis (Pheia) erythrotelus Walker, 1854 nor any other species ever placed in Hyaleucerea shares any particular resemblance to E. luctuosa.

The transfer of *H. luctuosa* to *Episcepsis* is based on 2 features: overall similarity of its habitus to that of *E. venata* Butler, 1877, the type species of the genus; and on the peculiar androconia of these species. The androconia on the hindwing of some *Episcepsis* species such as *E. luctuosa* and *E. venata* are somewhat similar to the androconia examined in *Heliura*. They differ, however, in 2 respects: in *Episcepsis* no species shows a modification of the hindwing as extreme as noted in *Heliura*, and we did not observe glandular scales on the abdomen as part of the androconial complex.

*Episcepsis littoralis* Rothschild, 1911 may also be a synonym of *Heliura luctuosa*, although conspicuous differences in the color pattern may exist. Confirmation of this hypothesis is pending dissections of the types.

Eucereon metoidesis Hampson, 1905 (Fig. 9)

- *Eucereon cinctum* Hampson, 1898: 486, not Schaus, 1896b: 134, misidentification.
- Eucereon metoidesis Hampson, 1905: 430. Holotype male, by monotypy. [BRAZIL], Pará, Amazons (BMNH) [examined]; Hampson, 1914: 317; Draudt, 1915: 171, pl. 24, row h.

Eucereon metoedesis [sic]; Zerny, 1912: 141, misspelling.

- Eucereon metoidesis romani Bryk, 1953: 231. Lectotype male hereby designated. [BRAZIL], Amazonas, Taracuá, 22.ii. [not examined].
- *Eucereon theophanes* Schaus, 1924: 17. Lectotype male herby designated. BRITISH GUYANA, Potaro River. (USNM) [examined] (Fig. 10). **New** synonym.

#### Remarks

*Eucereon metoidesis* was proposed by Hampson (1905) for his earlier misidentification (Hampson, 1898: 486, fig. 271) of *Eucereon cinctum* Schaus, 1896b. The specimen here regarded as the holotype is the only specimen mentioned by Hampson (1898) in the redescription of *E. cinctum* (*sensu* Hampson *nec* Schaus). This specimen was found correctly labeled as the holotype in the BMNH.

*Eucereon* Hübner [1819] 1816 is one of the largest genera of Ctenuchina, and is very likely

polyphyletic (Travassos 1959; Donahue 1993; L. R. Pinheiro, unpublished). In fact, even its position within the subtribe was disputed by Travassos (1959), who thought that the core concept of the genus belonged in the previous concept of Arctiidae (and not in the then-recognized family Ctenuchidae); this was in accordance with Kirby (1892), who treated *Eucereon* in his newly created subfamily Phaegopterinae. However, this change of classification was not formally made, and it was not recognized by subsequent authors (Watson et al. 1980; Donahue 1993; Kitching & Rawlins 1999). For this reason we treat *Eucereon* as a member of Ctenuchina, pending a comprehensive study of the limits of *Eucereon* and its subtribal position within Arctiini.

*Eucereon metoidesis* shares morphological similarities with the type species of the genus, *E. archias* Stoll, 1790, which might indicate that it is correctly placed in this genus. These characters are mainly from the scaling pattern of the forewings and abdomen, and characters of the male genitalia.

*Eucereon metoidesis romani* was originally described as a form, and according to the ICZN (article 45.6.4) is to be regarded as a subspecies. The validity of its subspecies status has not been evaluated.

Mesocerea apicalis (Rothschild, 1911) (Fig. 11)

Teucer apicalis Rothschild, 1911: 42. Lectotype male, by subsequent designation (Hampson, 1914: 303), SURINAME, Aroewarwa Creek, Maroewym Valley (S. M. Klages). (BMNH) [examined]; Zerny, 1912: 111; Draudt, 1915: 127.

Mesocerea apicalis; Hampson, 1914: 303, fig. 45.

Delphyre leucomela Kaye, 1919: 93. Lectotype male hereby designated: FRENCH GUYANA, coll. Joicey (BMNH) [examined]. With 5 labels: "Type HT"; "Delphyre leucomela Type Kaye Ann Mag Nat Hist IXth Series Vol IV (Aug 1919) p. 93"; "Fr. Guiana"; "Presented by J. J. Joicey Esq. Brit. Mus. 1931-444"; and "Kb-Dia-Nr. 1091 B. Kreusel dok." (BMNH) [examined] (Fig. 12) New synonym.

# Remarks

Both *T. apicalis* and *D. leucomela* were described from an unspecified number of specimens. Only one specimen for each name was found in the collection of the BMNH; the specimen with the correct labels is here identified as the lectotype of *T. apicalis* designated by Hampson (1914). The male found under the label *D. leucomela* is here regarded as the lectotype. *Teucer apicalis* was transferred to *Mesocerea* when Hampson (1914) described this genus.

#### EUCHROMIINA

Mirandisca harpalyce (Schaus, 1892) (Fig. 13)

- Cosmosoma harpalyce Schaus, 1892a: 275. Lectotype male hereby designated: BRAZIL, Petrópolis. With 6 labels: "Type No. 10727 U.S.N.M."; "Cosmosoma harpalyce Type Sch."; "Petropolis, Brazil"; "Collection WmSchaus"; "Spec fig."; "Kb-Dia-Nr 1711 B. Kreusel dok." (USNM) [examined]; Schaus, 1892b: pl. 1, fig. 11; Hampson, 1898: 253; Zerny, 1912: 71; Draudt, 1915: 83.
- Mirandisca harpalyce; Travassos Filho, 1955: 670; Watson et al., 1980: 119.
- Cosmosoma albipuncta Gaede, 1926: 123. Holotype male, by monotypy: [BRAZIL], Rio Grande do Sul, coll. Staudinger. (ZMHB) [examined] (Fig. 14). New synonym.

#### Remarks

*Cosmosoma harpalyce* was described from an unknown number of specimens. According to recommendation 73F of the ICZN (1999), we here designate a lectotype rather than assuming a holotype.

*Mirandisca* Travassos Filho, 1955 was created to accommodate *C. harpalyce*, because it differs from other species classified in *Cosmosoma* Hübner, 1823. This taxonomic decision was based on the wing venation, as follows: vein R1 branching beyond the discal cell instead of on it, as occurs in the type species of *Cosmosoma*, *Sphinx auge* Linnaeus, 1767.

#### PHAEGOPTERINA

 $\label{eq:seudopharus} Pseudopharus nigra \, (Schaus, 1904), {\it New \, combination} \, (Fig. \, 15)$ 

- Neacerea nigra Schaus, 1904: 136. Holotype male, by evidence of monotypy. [PANAMA], Chiriqui. (USNM) [examined].
- Delphyre nigra; Hampson, 1914: 302; Zerny, 1912: 136; Draudt, 1915: 166, pl. 30 row b; Draudt, 1917: 211.

# Remarks

Two additional species, *Pseudopharus hades* Dognin, 1909 and *Delphyre spreta* Draudt, 1915, seem to be remarkably similar to *P. nigra*. Unfortunately, the holotype of the former, a female, lacks the abdomen. For this reason, a synonymy between these 2 species is not proposed here. The types of Draudt could be, according to Horn & Kahle (1935-1937), in the MNHN, MTD, or SMF. The first 2 collections were visited by the first author but the types were not found in either of them. Draudt's types were also found in the BMNH, but the 3 syntypes of *Neacerea spreta* were not among them. Hence, it is possible that the types are in Frankfurt. Although Draudt's figure of *D. spreta* corresponds to the phenotype of *N. nigra*, we prefer not to make assumptions without inspecting the types.

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