COMBINATIONS AND SYNONYMIES IN NEW WORLD LIMACODIDAE, MEGALOPYGIDAE, LASIOCAMPIDAE AND ARCTIIDAE (LEPIDOPTERA)

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ABSTRACT. Six generic and 65 specific names are synonymized, 26 species are transferred to other genera, 30 removed from synonymy or from subspecific status. **Blazia** Schaus is transferred from Lymantriidae to Limacodidae, **Laruma** Walker and **Renada** Walker from Limacodidae to Lasiocampidae and Arctiidae, respectively. **Renada** is a junior synonym of **Paracles** Walker. Several previously unrecognized Brazilian taxa described by Walker, for which types are lost, have been identified.

KEY WORDS. Lepidoptera, Limacodidae, Megalopygidae, combinations, synonymies

The synonymies and new combinations in this paper are a result of the preparation of a list for Atlas of Neotropical Lepidoptera (BECKER & EPSTEIN, in press) (BECKER, in press). Most of these were obtained while checking types and during the course of identifying a synoptic collection taken by Becker to the USNM and to the BMNH.

We also tried to clarify the genera and species described by WALKER (1855, 1856), which were regarded as unrecognizable by DYAR (1905: 396). Most of these unrecognized specimens belonged to the Fry Collection. According to Hampson, as reported by DYAR (1905: 359) "...the specimens were returned by Walker in such condition that their acceptance was refused and it is not known what became of them". HORN & KAHLE (1935-1937) give the location of Fry's collection as the BMNH. We were unable to locate them in the collections of the BMNH and the UMO, where most of Walker types are deposited. Therefore, it is very likely that these specimens do not exist anymore.

Most of the missing taxa were described from specimens collected around Rio de Janeiro, Brazil. We carefuly interpreted Walker's descriptions and selected specimens from the same region as well as from many localities in the Atlantic Forest of Brazil. For all of the species, except for *Niaca curvimargo* and *Amydona punctata,* we feel that we have good evidence to recognize their identity. The only previously recognized species from DYAR's list (1905:396)

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was *Limacodes concolor*, as the dalcerid genus *Acraga* Walker (MILLER, in press).

Lectotypes for syntype series of Druce, Dyar, Dognin and Schaus are designated here. DRUCE did not always mention the number of specimens in his descriptions in the "Biologia" (1887) and elsewhere (1895,1906). Specimens that were examined by Druce, matching type localities in the BMNH, are designated as lectotypes, although we are not certain if syntypes exist elsewhere.

Genera, and species under each genus, are treated in alphabetical order by family or subfamily.

The following abbreviations are used in this work:

AMNH – American Museum of Natural History, New York, USA.

BMNH – The Natural History Museum, London, England.

CMNH – Carnegie Museum of Natural History, Pittsburgh, USA.

LACM – Los Angeles County Museum, Los Angeles, California, USA.

MNHU – Museum für Naturkunde der Humboldt-Universität, Berlin, Germany.

UMO – University Museum, Oxford, England.

UNAM – Universidad Nacional Autonoma de Mexico, Mexico City, Mexico.

USNM – National Museum of Natural History, Washington, USA.

ZSBS – Zoologische Sammlung des Bayerischen Staates, Munich, Germany.

NOMENCLATURAL SUMMARY

LIMACODIDAE

Acharia Hübner, [1819]
fuscoflava (Dognin, 1910), **comb.n.**
Blazia Schaus, 1927
antiqua (Dyar, 1905), **comb.n.**
lixivia (Dognin, 1923), **syn.n., comb.n.**
Claphidia Dyar, 1921
tersula (Druce, 1906)
microstagma Dyar, 1921, **syn.n.**
Epiperola Dyar, 1898
grandiosa Dognin, 1911
cuneata (Strand, 1911), **syn.n., comb.n.**
peluda (Dognin, 1899)
albimarginata (Kaye, 1901), **syn.n.**
argentilinea Gaede, 1916, **syn.n.**
Euclea Hübner, [1819]
baranda Schaus, 1900
cassida Dyar, 1927, **syn.n.**

buscki Dyar, 1912
immundara Dyar, 1916, **syn.n.**
jelyce Dyar, 1926, **syn.n.**
delphinii (Gray, 1832)
varia (Walker, 1855), **syn.n., comb.n.**.
diversa (Druce, 1887)
obliqua Hy. Edwards, 1886
dolliana Dyar, 1905, **syn.n.**
spadicis (Grossbeck, 1906), **syn.n.**
flava Barnes & McDunnough, 1910, **syn.n.**
retroversa Dyar, 1907, **stat.rev.**
urba Druce, 1887, **stat.rev.**
vericrux Dyar, 1909, **stat.rev.**
zygia Druce, 1887, **stat.rev.**
costilinea (Dyar, 1914), **syn.n.**
Euphobetron Dyar, 1905
cypris (Grote, 1894)
aquapennis Dyar, 1905, **syn.n.**
hydropteris Dyar, 1937, **syn.n.**
Euprosterna Dyar, 1905
elaea (Druce, 1887), **comb.n.**.
elaeasa Dyar, 1905, **syn.n.**
avellana (Dognin, 1910), **syn.n.**
Isochaetes Dyar, 1899
marinna (Dyar, 1905)
ashtabel Dyar, 1927, **syn.n.**
hahneli (Hering & Hopp, 1927), **syn.n.**
Monoleuca Grote & Robinson, 1868
occidentalis Barnes & McDunnough, 1912
fieldi Barnes & Benjamin, 1925, **syn.n.**
disconcolorata Barnes & Benjamin, 1925, **syn.n.**
Natada Walker, 1855
Mareda Walker, 1855, **syn.n.**
Vipsorola Dyar, 1920, **syn.n.**
caria (Druce, 1887), **comb.rev.**
ceres (Druce, 1887), **comb.n.**.
cochlidionis Dyar, 1907, **comb.n.**.
cora (Schaus, 1920), **syn.n.**
daona (Druce, 1887), **stat.rev.**
debella Dyar, 1905, **stat.rev.**
molicula Dognin, 1911, **syn.n.**

dognini Dyar, 1905, **stat.rev.**
lacipea (Druce, 1890), **comb.n.**.
luscens (Walker, 1855)
ferruginea (Walker, 1855), **syn.n.**, **comb.n.**.
nigripuncta (Barnes & McDunnough, 1910), **stat.rev.**
sardites (Druce, 1900), **stat.rev.**
semivitrea (Schaus, 1920), **comb.n.**.
subpectinata Dyar, 1905
nucea (Dognin, 1920), **syn.n.**
Perola Walker, 1855
casasi (Beutelspacher, 1988), **comb.n.**.
jorgenseni Schaus, 1921
subpunctella Dyar, 1927, **syn.n.**
petropolis Dyar, 1905
benedocta Dyar, 1926, **syn.n.**
sibillanta Dyar, 1926, **syn.n.**
Platyprosterna Dyar, 1905
elaeetta Dyar, 1905
perpectinata (Dyar, 1905), **syn.n.**, **comb.n.**
pernambuconis (Dyar, 1905), **comb.n.**
Prolimacodes Schaus, 1896
badia (Hübner, [1822])
apsorrhoa Dyar, 1925, **syn.n.**
scaphoides Hering & Hopp, 1927, **syn.n.**
trigona (Hy. Edwards, 1882)
dividua Dyar, 1907, **syn.n.**
undifera (Walker, 1855)
Semyra Walker, 1855
Clamara Walker, 1855, **syn.n.**
Surida Walker, 1855 **syn.n.**
bella (Herrich-Schäffer, [1854])
mariae Dyar, 1906, **syn.n.**
veterna Dognin, 1923, **syn.n.**
coarctata Walker, 1855, **stat.rev.**
finita Walker, 1855
moeschleri (Schaus, 1892)
incisa (Walker, 1855), **comb.n.**
cardia Schaus, 1894, **syn.n.**
paula Dyar, 1905, **syn.n.**
eucharista Dyar, 1912, **syn.n.**
phrygia Dyar, 1921, **syn.n.**

erna Dyar, 1927, **syn.n.**
terminata (Walker, 1855), **comb.n.**
zynie Dyar, 1905, **syn.n.**
Talima Walker, 1855
Agisa Walker, 1855, **syn.n.**
assimilis (Dyar, 1911)
fuscipars (Dyar, 1918), **syn.n., comb.n.**.
ingenour Dyar, 1926
postica Walker, 1855
filifera Dyar, 1926, **syn.n.**
insulla Dyar, 1927, **syn.n.**
rufoflava (Walker, 1855), **comb.n.**
sulla (Schaus, 1892), **syn.n.**
ieco Dyar, 1926, **syn.n.**
samula (Druce, 1895), **com.n.**
straminea (Schaus, 1892)
sissypha Dyar, 1927, **syn.n.**
Tanadema Dyar, 1905
mas Dyar, 1905
foemina Dyar, 1905, **syn.n.**
neutra Dyar, 1908
nora Dyar, 1937, **syn.n.**
Ulamia Möschler, 1883
dolobrata (Stoll, 1780)
sericea (Schaus, 1892), **syn.n.**
Vipsania Druce, 1887
melanois (Dyar, 1912)
schultzei Hering & Hopp, 1927, **syn.n.**

MEGALOPYGIDAE

MEGALOPYGINAE

Megalopyge Hübner, [1820]
basalis (Walker, 1856), **comb.n.**
apicalis (Herrich-Schäffer, [1856]), **syn.n.**
basigutta (Walker, 1865), **syn.n.**
globulus (Dognin, 1894), **comb.n.**
radiata Schaus, 1892
flavivertex Schaus, 1921, **syn.n.**
Podalia Walker, 1856
amarga (Schaus, 1905), **stat.rev.**
nigrescens (Schaus, 1905), **syn.n.**
farmbri Kaye, 1925, **syn.n.**

annulipes (Boisduval, 1833), **comb.n.**
interlineata (Dyar, 1928), **syn.n.**
contigua (Walker, 1866)
salacia (Druce, 1887), **syn.n.**
montana (Schaus, 1910), **syn.n.**
dimidiata (Herrich-Schäffer, [1856])
arpi (Schaus, 1915), **syn.n.**
habitus (Hy. Edwards, 1887), **stat.rev.**
intermaculata (Dognin, 1916)
vicina (Hopp, 1926), **syn.n.**
marmorata (Rothschild, 1910), **comb.n.**
cirrata Hopp, 1935, **syn.n.**
Psychagrapha Walker, 1855
floccosa Walker, 1855
TROSIINAE
Aithorape Hopp, 1927
roseicornis (Dognin, 1899)
flammicornis (Schaus, 1905), **syn.n.**
Coamorpha Dyar, 1913
glutina (Schaus, 1920), **stat.rev.**
Hysterocladia Felder, 1874
ignicornis (Schaus, 1905)
lena (Schaus. 1912), **syn.n.**
Trosia Hübner, [1820]
albida (Dognin, 1905), **stat.rev.**
amala Dyar, 1910, **stat.rev.**
amarilla Hopp, 1922, **stat.rev.**
anax Dognin, 1923, **stat.rev.**
dimas (Cramer, 1775)
donckieri Dognin, 1924, **stat.rev.**
fallax (Felder, 1874)
flavida Dognin, 1910, **stat.rev.**
fumosa Hopp, 1934, **stat.rev.**
incostata Schaus, 1905, **stat.rev.**
metaleuca (Druce, 1906), **stat.rev.**
misda Dyar, 1910, **stat.rev.**
nigra Hopp, 1934, **stat.rev.**
nigropunctigera Fletcher, 1982
punctigera (Stoll, 1790)
obsolescens Dyar, 1899, **stat.rev.**
pulla Forbes, 1942

roseipuncta (Druce, 1906)
rosita Schaus, 1920, **stat.rev.**
semirufa (Druce, 1906)
tolimata Dognin, 1923, **stat.rev.**
tricolora (Fabricius, 1787), **stat.rev.**
zernyi Hopp, 1930

LASIOCAMPIDAE

Euglyphis Hübner, [1820]
punctata (Walker, 1855), **comb.n.**
falsa (Schaus, 1894), **syn.n.**
Laruma Walker, 1855
heterogenea Walker, 1855

ARCTIIDAE

Paracles Walker, 1855
Renada Walker, 1855, **syn.n.**
lateralis (Walker, 1855), **comb.n.**

INCERTAE SEDIS

Niaca Walker, 1855
curvimargo Walker, 1855
Leucophobetron Dyar, 1897
punctata (Druce, 1901)

LIMACODIDAE

Acharia fuscoflava (Dognin, 1910), **comb.n.**

Miresa fuscoflava Dognin, 1910: 40. Holotype male ECUADOR: Loja, 1889 (USNM, 29779) [examined].

Undoubtedly placed in *Miresa* because of the yellow scales on the dorsum of the thorax and wings. This species has a suite of male genitalic characters that are foreign to *Miresa* and clearly match *Acharia* (=*Sibine*; BECKER & MILLER, 1988) (EPSTEIN, 1988). These include a ventrally flexed aedeagus, vesica with stout cornuti, prominent manica, and eversible tongue in the transtilla. The female is unknown.

Blazia Schaus, 1927 **assig.n.**

Blazia Schaus, 1927:255. Type-species: **Orgya lixivia** Dognin, 1923:10, by original designation.

This genus, originally included in Lymantriidae, is very closely related to or a synonym of *Epiperola* or *Perola* on the basis of the male genitalia and the forked cubital vein in the forewing.

Blazia antiqua (Dyar), **comb.n.**.

Platyprosterna antiqua Dyar, 1905:378. Lectotype male, BRAZIL: Paraná, Castro (Jones)(BMNH), here designated [examined].

Orgya lixivia Dognin, 1923:10. Holotype male, BOLIVIA: Rio Songo, 750m (USNM, 29923) [examined]. **Syn.n., comb.n.**

The size, colour and pattern leave no doubt that these are synonyms. There is no other South American limacodid which can be confused with this species.

Claphidia tersula (Druce)

Eulimacodes tersula Druce, 1906:90. Lectotype male, PERU: La Oroya, Carabaya, 3000 ft. (BMNH) [examined].

Claphidia microstagma Dyar, 1921: 193. Holotype male, BOLIVIA: Buena Vista (USNM, 24947) [examined]. **Syn.n.**

A specimen from the type locality of *tersula* in southeastern Peru closely matches the type of *microstagma*. Other specimens from nearby central Bolivia and Acre, Brazil (CMNH) also match.

Epiperola grandiosa Dognin

Epiperola grandiosa Dognin, 1911 [Oct.]:62. Holotype male, FRENCH GUIANA: Nouveaux Chantier, May (Le Moult) (USNM) [examined].

Perola cuneata Strand, 1911 [Dec.]:43. Holotype female, ECUADOR: Macas (Niepelt) (MNHU) [not examined]. **Syn.n., comb.n.**

In the USNM collection there is a color illustration of the type of *cuneata*, undoubtedly the female of *grandiosa*. The forewing pattern is unique among large species in the *Perola* complex, with the pale fascia running from the base to the tornus, against a dark-brown background. Male and female specimens from Corcovado, Costa Rica, were collected on the same dates by D. Janzen and W. Hallwachs. This species will be kept in *Epiperola*, since it has only one pair of spurs on the hind tibia, though this group is in need of revision.

Epiperola peluda (Dognin)

Perola peluda Dognin, 1899:7. Holotype male, COLOMBIA: Micay, VIII.1896 (USNM, 29789) [examined].

Sisyrosea albimarginata Kaye, 1901:158. Holotype male, TRINIDAD: Tabaquite (BMNH) [examined]. **Syn.n.**

Epiperola argentilinea Gaede, 1916:208. Holotype male, BOLIVIA ['Brazil']: Rio Songo, 1200m, 1896 (Garlepp) [not examined]. **Syn.n.**

Genitalic preparations of specimens that matched *peluda* and the darker *albimarginata* were identical. Both forms were found by Becker to occur at the same place and date (Brazil: Pará, Capitão Poço, 25-31.I.1984). A male from Becker collection has been compared with Dognin and with Kaye's types.

DYAR (1937) synonymized *argentilinea* under *albimarginata*. *Epiperola antelia* Druce, 1906, may be another synonym of *peluda*.

Euclea baranda Schaus

Euclea baranda Schaus, 1900:230. Holotype male, COLOMBIA: (USNM, 9112) [examined].

Euclea cassida Dyar, 1927:548. Lectotype male, BRAZIL: Amazonas, Caiçara (Dognin) (USNM, 40687), here designated [examined]. **Syn.n.**

The male genitalia of the holotype of *baranda* and the paralectotype of *cassida* are identical. This may be a southern form of *Euclea buscki*, treated below. The central claw of the uncus is reduced, with lateral lobes expanded, compared to *buscki*, with central claw and lateral lobes nearly equal and closely spaced.

E. rufa Butler, 1878, examined in the BMNH, may be a senior synonym of *baranda* or *buscki*.

Euclea buscki Dyar

Euclea buscki Dyar, 1912:95. Holotype male, PANAMA: Cabima, May 1911 (Busck) (USNM, 14285) [examined].

Euclea immundara Dyar, 1916:33. Holotype male, MEXICO: Tabasco, Teapa, xi.1913 (Miller) (USNM, 18899) [examined]. **Syn.n.**

Euclea jelyce Dyar, 1926:81. Lectotype male, COSTA RICA: Sixaola River (USNM, 28940), here designated [examined]. **Syn.n.**

Male genitalia of *buscki* from the type locality match that of the paralectotype of *jelyce* and specimens that closely match the holotype of *immundara* Dyar from Veracruz, Mexico and Guatemala.

Euclea delphinii (Gray)

Limacodes delphinii Gray, 1832:789. Holotype female, USA [no further data] [presumably lost].

Nyssia varia Walker, 1855:1137. Holotype male, locality unknown (Doubleday) [presumably lost]. **Syn.n., comb.n.**

Walker described *varia* as "Fore wings with ferruginous flecks, which form zigzag transverse lines, green at the base, and with an irregular green stripe near the interior border, brown varied with green towards the tips." This closely fits the pattern of some forms of *delphinii*, an extremely variable species. According to WALKER (1855), *varia* had no locality label, yet he listed *varia* under "East Indies species". The specimen could well come from North America as did several other mislabeled specimens from Doubleday collection, also described by WALKER. Other like examples of Walker mislabeled North American species were found by FERGUSON (1973). DYAR (1905) listed *varia* as one of the unrecognized species presumably from the New World fauna.

Euclea diversa (Druce)

Semyra diversa Druce, 1887:220. Lectotype female, GUATEMALA: Cerro Zunil, 3000 to 4000 ft (Champion) (BMNH), here designated [examined].

It is likely that a specimen placed with the newly designated lectotype in the BMNH collection is a syntype, though it does not have a type label. The labels of this specimen matches the label data (Panama: Bugaba, 800-1500 ft, Champion) and poor condition cited by DRUCE (1887). Hence, we designate this specimen as a paralectotype.

Euclea obliqua Hy. Edwards

Euclea obliqua Hy. Edwards, 1886:10. Holotype male, USA: "Florida, Indian River" [**sic!**] (Neumoegen) (USNM) [examined].

Euclea dolliana Dyar, 1905:369. Lectotype female, USA: Arizona, Huachuca Mts, Cochise Co., Palmerlee (Schaeffer) (USNM), here designated [examined]. **Syn.n.**

Monoleuca spadicis Grossbeck, 1906:289. Holotype male, USA: Arizona, Minnehaha, Yavapai Co., 26.viii (AMNH) [examined]. **Syn.n.**

Euclea flava Barnes & McDunnough, 1910:161. Holotype female, USA: Arizona, Pima Co., Babaquivera Mts, (USNM) [examined]. **Syn.n.**

The holotype of *obliqua* in the USNM type collection is without label data other than type and Brooklyn Mus. labels. EDWARD'S description of the oblique fascia on the forewings, pointing "towards the apex" matches the type. However, the type specimen is of a species that does not occur in Florida, rather it is synonymous with *dolliana*, *spadicis* and *flava,* all found in southern Arizona. The forewing fascia and forked radial veins, and brushed genitalia all match specimens with these three names.

The types of *spadicis* and *obliqua*, both have less contrasting fascia than the lectotype of *dolliana*. DYAR (1935) placed *Monoleuca spadicis* in *Euclea* and *Euclea obliqua* in *Monoleuca*. *Euclea flava* is a yellow form of *obliqua*. Specimens of the *flava* form in the USNM collection are primarilly from Gila Co., Arizona, though one additional specimen is from Madeira Canyon, Santa Cruz Co.

Euclea retroversa Dyar, **stat.rev.**

Euclea retroversa Dyar, 1907:565. Lectotype male, MEXICO: Cuernavaca, vii.1906 (Schaus) (USNM, 10338), here designated [examined].

E. retroversa was regarded by Dyar (1937) as a subspecies of *diversa* Druce. Male genitalia of specimens from Veracruz, matching the lectotype of *diversa*, were compared with the genitalia of the lectotype of *retroversa*. These preparations belong to clearly distinct species.

Euclea urba Druce, **stat.rev.**

Euclea urba Druce, 1887:216. Holotype male, COSTA RICA: Rio Sucio (Rogers) (BMNH) [examined].

This species has been included in *Euprosterna* by DYAR (1905, 1937) on the basis of its small size and general habitus. However, the two lateral lobes on the uncus of the male holotype and forewing maculation clearly belong in *Euclea*.

Euclea vericrux Dyar, **stat.rev.**

Euclea vericrux Dyar, 1909:156. Holotype female, MEXICO: Veracruz, ex larva (Knab) (USNM, 12628) [examined].

DYAR (1935) synonymized *vericrux* with *diversa*. The genitalia of the holotype female of *vericrux* is clearly distinct from those of specimens that match the female syntype of *diversa* from Veracruz. We have been unable to locate males from Veracruz that match the holotype. However, *vericrux* closely resembles members of the *retroversa* complex, which in turn has similar female genitalia. This is best kept as a species until this complex can be more completely revised.

Euclea zygia Druce, **stat.rev.**

Euclea zygia Druce, 1887:216. Lectotype male, PANAMA: Volcan Chiriqui, 2000-3000 ft (Champion) (BMNH), here designated [examined].

Metraga costilinea Dyar, 1914:391. Lectotype male, MEXICO: Tabasco (Müller) (USNM, 16502), here designated [examined]. **Syn.n.**

Male genitalia of the lectotype of *costilinea* match those of a specimen from the type locality of *zygia*. DYAR (1937: 1117) synonymized *zygia* under *plugma* Sepp. A male specimen matching SEPP's figure, also from Suriname, has genitalia quite distinct from the genitalia of specimens matching *zygia* Druce from Panama, Costa Rica and Mexico. Part of the confusion surrounding *zygia* may be due to the variation in hindwing color, from pale to dark. *E. zygia* with dark hindwings closely resemble *plugma* and *determinata*. Secondly, other species or variants in the *plugma* complex (*E. chiriquensis* Schaus and *E. colle* Dyar) are sympatric with *zygia* in Panama and Costa Rica, respectively.

The male genitalia of a syntype of *determinata* (BMNH) is clearly distinct from types of *costilinea* and *zygia*. *E. costilinea* was previously regarded as a form of *determinata* Druce by DYAR (1937). This led to the misidentification of *costilinea* as *determinata* in the U. S. collections.

Euphobetron cypris (Grote)

Eudryas cypris Grote, 1894: 8. Holotype male PARAGUAY: (no further data) (BMNH) [examined].

Euphobetron aquapennis Dyar, 1905:387. Lectotype male, PARAGUAY: Sapucay (Forster) (USNM, 9003), here designated [examined]. **Syn.n.**

Euphobetron hydropteris Dyar, 1937:1131. Lectotype male, COSTA RICA: Sixaola River, iii (Schaus) (USNM, 40772), here designated [examined]. **Syn.n.**

This is a widely distributed species, which shows variable color patterns, though genitalia are quite homogeneous. The designated paralectotype of *aquapennis* is a male in the BMNH, Potaro River, Guyana [British Guiana] (Roberts).

Euprosterna elaea (Druce), **comb.n.**

Perola elaea Druce, 1887:219, pl. 23, fig. 14. Holotype? male: PANAMA: Volcan de Chiriqui (Ribbe) (MNHU), [not traced].

Euprosterna elaeasa Dyar, 1905:377. Lectotype male, FRENCH GUIANA: St. Jean, Maroni River (USNM, 8987), here designated [examined]. **Syn.n.**

Natada avetlana Dognin, 1910:41. Holotype male, FRENCH GUIANA: La Forestiere, Maroni, iv (Le Moult) (USNM, 29788) [examined]. **Syn.n.**

The specimen perported to be the type of *Perola elaea* Druce in the BMNH is not the true type, being both misidentified and not from the type locality. The type locality of *elaea* is Panamá: Volcan de Chiriqui. The specimen labeled "type" in the BMNH is from Mexico: Jalapa and is a distinct, unrelated species (EPSTEIN, in prep.). DYAR (1905:373, 377) who wrote that he examined DRUCE's type, in all liklihood examined this mislabeled specimen. DYAR (1905) was aware that the "type" was in mixed series and that the other species matched *Perola elaea* figured in DRUCE, renaming the latter *elaeasa* Dyar.

The figure of *elaea* Druce in the 'Biologia' matches the syntypes of *elaeasa* Dyar. DRUCE's description is vague enough that it could almost match either species, however the "narrow black line crossing from near the apex to the inner margin close to the base" fits the figure better than the *Epiclea*, which has a less oblique line that is more white than black. Furthermore, it appears that *Epiclea* does not occur anywhere outside of Mexico, whereas *elaea* Druce has a much broader distribution from Mexico to Brazil.

The location of the type specimen(s) is given as 'mus. Staudinger', collected by Ribbe (DRUCE, 1887). Through recent correspondence with the MNHU we were unable to locate the type. DYAR (1937) gave the location of the specimen figured in DRUCE [possibly the type] as the Berlin Museum.

It is uncertain that DRUCE had a syntype series, since the number of specimens used in the original description is not montioned. However, a series seems possible, since DRUCE (1887) mentions "one specimen" for two other species on the same page.

Isochaetes marinna (Dyar)

Vipsophobetron marinna Dyar, 1905:391. Lectotype female, FRENCH GUIANA: Cayenne (Schaus) (USNM, 9006), here designated [examined].

Isochaetes ashtabel Dyar, 1927:550. Lectotype male, PARAGUAY: Molinas, x.1925 (Schade) (USNM, 40701), here designated [examined]. **Syn.n.**

Euphobetron hahneli Hering & Hopp, 1927:182, Fig. 10. Holotype male, BRAZIL: Amazonas, Massauary (Hahnel) (NMHU) [not examined]. **Syn.n.**

Brushed male genitalia of a specimen from the type locality of *marinna* (BMNH) matches the genitalia of the type of *ashtabel* and specimens from Goiás and Planaltina, DF in Central Brazil. A color figure, identified as the type of *hahneli* in the USNM, matches the type of *ashtabel.* Genitalia of the type of *hahneli* (Hopp & Hering, 1927) matches those from Brazil mentioned above. Specimens range in color from dark (as in the types) to rufous as in *I. rufescens* (Schaus).

Monoleuca occidentalis Barnes & McDunnough

Monoleuca occidentalis Barnes & McDunnough, 1912:32. Holotype male, USA: San Diego, Cal. (Ricksecker) (USNM) [examined].

Monoleuca fieldi Barnes & Benjamin, 1925:126. Holotype male, USA: Cal.,Warner's, vii.1917 (G.F.Field) [examined]. **Syn.n.**

Monoleuca disconcolorata Barnes & Benjamin, 1925:126. Holotype male, USA: Cal., San Bernardino Mts, Camp Baldy, 8-l5.vii (Barnes) (USNM) [examined]. **Syn.n.**

Male genitalia of specimens matching the three holotypes belong to the same species, with *fieldi* and *disconcolorata* as pale morphs of *occidentalis.*

Natada Walker

Natada Walker, 1855:1108. Type-species: **Natada rufescens** Walker, 1855:1109, by subsequent designation by Kirby, 1892:541.

Mareda Walker, 1855:1157. Type-species: **Mareda ferruginea** Walker, 1855:1157, by monotypy. **Syn.n.**

Vipsorola Dyar, 1920:197. Type-species: **Tanadema semivitrea** Schaus, 1920:149, by original designation. **Syn.n.**

Natada now has four synonyms, including *Bombycocera* Felder, 1874:pl. 83, fig. 13, [type species: *simois* (Stoll)].

See *Natada semivitrea* below.

Natada caria (Druce), **comb.rev.**

Perola caria Druce, 1887:219. Holotype male, PANAMA: Volcan de Chiriqui, 2000 to 3000 ft (Champion) (BMNH) [examined].

This species was transferred to *Natada* from *Perola* by Dyar (1905) and to *Euprosterna* by FORBES (1942:384). The male genitalia clearly is related to *Natada simois* (Stoll, 1780), the complex of *Natada fusca* (Druce, 1887), and

most closely to *Platyprosterna ceres* (Druce), transferred to *Natada* below. *N. caria* is a wet forest species in Mexico: Veracruz, Tuxtla Biological Station (Becker), Costa Rica and Panamá. Other closely related species treated below include *cochlidionis* and *lacipea*.

Natada ceres (Druce), **comb.n.**

Perola ceres Druce, 1887:219. Lectotype female, GUATEMALA: Senahu, Rio Maria Linda, 500 ft (Champion) (BMNH), here designated [examined].

This species was transferred to *Platyprosterna* by DYAR (1905:378). The male genitalia is very close to *Natada caria* (Druce), only larger. The size and color pattern are clearly disjunct from the previous species, justifying keeping them as separte species. *N. ceres* occurs in the dry areas on the Pacific slopes of Guerrero and the dry areas of the Yucatán Peninsula, from Campeche, Mexico through Belize, down to Guatemala.

Natada cochlidionis (Dyar), **comb.n.**

Euprosterna cochlidionis Dyar, 1907:566. Lectotype male, MEXICO: Guerrero, Iguala, vi.1906 (Schaus) (USNM, 10339), here designated [examined].

Natada cora Schaus, 1920:90. Holotype male, MEXICO: Sinaloa, Venadio (USNM, 22488) [examined]. **Syn.n.**

The male genitalia of a light specimen of *cora* from Sinaloa matches that of the paralectotype of *cochlidionis* from Cuernavaca (USNM). Related to the *caria* complex.

Natada daona (Druce), **stat.rev.**

Perola daona Druce, 1887:219. Holotype male, COSTA RICA: [No further data] (Von Patten) (BMNH) [examined].

DYAR (1905:381) regarded this as "probably conspecific with the preceeding [*nasoni* Grote]", though later (DYAR, 1937) kept them separate. However, recently DAVIS (1983) placed the two species in synonymy. However, comparison of the aedeagus from Costa Rican and U. S. specimens indicate that the two species are in fact distinct, though closely related.

Natada debella Dyar, **stat.rev.**

Natada debella Dyar, 1905:379. Holotype male, FRENCH GUIANA: St. Jean, Maroni River (Schaus) (USNM, 8991) [examined].

Natada molicula Dognin, 1911:62. Lectotype male, ARGENTINA: Chaco de Santiago del Estero, Rio Salado, xii (Wagner) (USNM, 29786), here designated [examined]. **Syn.n.**

Natada debella and *dognini* were previously synonymized under *lucens*. Genitalic preparations of the types of *debella* and *dognini* are clearly distinct from each other and from two male specimens matching the description of

lucens from near the type locality in Rio de Janeiro and São Paulo.

The male genitalia of the type of *molicula* matches those of *debella*. It appears that *molicula* is a small, light colored population of *debella*, sometimes having a trace of the two spots often on the forewing of *debella*. *N. debella* ranges from the Guianas to the central plateau of Brazil.

Natada dognini Dyar, **stat.rev.**

Natada dognini Dyar, 1905:379. Holotype male, COLOMBIA: Micay, viii.1896 (Dognin) (USNM) [examined].

See *debella*.

Natada lacipea (Druce), **comb.n.**

Perola lacipea Druce, 1890:218. Holotype male, MEXICO: Guerrero, Tierra Colorada, 2000 ft, x.1888 (Smith) (BMNH) [examined].

DYAR (1905, 1937) placed *lacipea* in *Euprosterna* Dyar. However, the distinctive male genitalia are related to the *caria* complex.

Natada luscens (Walker)

Amydona luscens Walker, 1855:1111. Holotype male, BRAZIL: Rio de Janeiro [no further data] (Fry Col.) [presumably lost].

Mareda ferruginea Walker, 1855:1157. Holotype male, BRAZIL: Rio de Janeiro [no further data] (Fry Col.) [presumably lost]. **Syn.n., comb.n.**

Walker's description of *Mareda ferruginea* gives enough information to justify this synonymy. The combination of white spots on the front coxae, color pattern and size can be related only to the population of *luscens* along the Brazilian Atlantic coast.

N. luscens was first placed in *Natada* by DYAR (1905). DYAR (1937) regarded *sardites, debella,* and *dognini* as either forms or subspecies of *luscens* (see *debella*).

Natada nigripuncta Barnes & McDunnough, **stat.rev.**

Natada nigripuncta Barnes & McDunnough, 1910:161-162. Holotype male, USA: Arizona, Prescott (Barnes) [examined].

Natada nigripuncta was previously synonymized with *sardites* (Dyar, 1937). Although the type of *sardites* has not been dissected, *nigripuncta* appears much closer to *dognini* in the male genitalia and in wing pattern. The type may be either a stray or improperly labelled, since most specimens matching the type are from Tabasco, Mexico south to Panamá.

Natada sardites (Druce), **stat.rev.**

Perola sardites Druce, 1900:512. Holotype male, COLOMBIA: Minca [no further data] (BMNH) [examined].

This species appears distinct from *luscens,* which it was previously synonymized with by (DYAR, 1937).

Natada semivitrea (Schaus), **comb.n.**

Tanadema semivitrea Schaus, 1920:149. Holotype male, GUATEMALA: Cayuga (Schaus) (USNM, 22494) [examined].

Placed in the monotypic genus *Vipsorola* by DYAR (1920), *semivitrea* is one of several species with dark wings and hyaline patches found convergently in New World limacodid genera including *Phobetron* and *Euclea*. This species belongs in *Natada,* sharing a unique combination of male genitalic and other characters. Females remain unknown in collections.

Natada subpectinata Dyar

Natada subpectinata Dyar, 1905:381. Holotype male, SURINAM: Surinam River, Geldersland (Schaus) (USNM, 8996) [examined].

Tanadema nucea Dognin, 1920:13. Holotype male, FRENCH GUIANA: St. Laurent du Maroni (Le Moult) (USNM, 29803) [examined]. **Syn.n.**

These were maintained as distinct species after DYAR (1937) transferred *nucea* to *Natada* based on minor differences in wing pattern. However these have been found to be highly variable in this genus. DYAR (1937) correctly synonymized *urichia* Schaus under *subpectinata.*

Perola casasi (Beutelspacher), **comb.n.**

Megalopyge casasi Beutelspacher, 1988:329. Holotype male, MEXICO: Jalisco, Estación de Biología de Chamela, 24.v.1982 (Pescador) (UNAM) [not examined].

The figures of the male genitalia and wing pattern of *casasi* [figs 8, 39] clearly belong to a limacodid. The extent and configuration of the valves, uncus, aedeagus and juxtal lobes place this species in the *Perola* complex.

Perola jorgenseni Schaus

Perola jorgenseni Schaus, 1921:81. Holotype male, ARGENTINA: Famiosa, vi.1929 (USNM, 23425) [examined].

Perola subpunctella Dyar, 1927:549. Lectotype male, BRAZIL: Paraná, Castro (Jones) (USNM, 40697), here designated [examined]. **Syn.n.**

Genitalia of both types are identical.

Perola petropolis Dyar

Perola petropolis Dyar, 1905:384. Lectotype male, BRAZIL: Rio de Janeiro, Petrópolis (Schaus) (USNM, 9001), here designated [examined].

Perola benedocta Dyar, 1926:91. Holotype male, ARGENTINA: Missiones, San Ignacio, Alto Paraná (USNM, 28947) [examined]. **Syn.n.**

Perola sibillanta Dyar, 1926:92. Holotype male, BRAZIL: São Paulo, Mogy Guaçu (USNM, 28951) [examined]. **Syn.n.**

This species exhibits variation in color and size, but specimens that match the types in the Becker Collection have identical genitalia.

Platyprosterna elaeetta Dyar

Platyprosterna elaeetta Dyar, 1905: 378. Lectotype male, BRAZIL: São Paulo (Schaus) (USNM, 8989), here designated [examined].

Natada perpectinata Dyar, 1905: 381. Lectotype male, BRAZIL: Rio de Janeiro (USNM, 8995), here designated [examined]. **Syn.n., comb.n.**

Specimens in the Becker collection, which match both types, have identical genitalia.

Platyprosterna pernambuconis Dyar **comb.n.**

Euprosterna pernambuconis Dyar, 1905:377. Holotype male, BRAZIL: Pernambuco, 29.i.1883 (Koebele) (USNM, 8988) [examined].

The male genitalia, wing pattern, and white scales on the front trochanter reveal a close relationship to the type-species *elaeetta* discussed above.

Prolimacodes badia (Hübner)

Noctua badia Hübner, [1822]:pl. 150, figs 696, 697. [Locality not given] [presumably lost].

Prolimacodes apsorrhoa Dyar, 1925:17. Lectotype male, MEXICO: Veracruz, Orizaba, viii.1908 (Müller) (USNM, 27865), here designated [examined]. **Syn.n.**

Prolimacodes scaphoides Hering & Hopp, 1927:177. Holotype male, MEXICO: Tabasco (Oberthür) (ZSBS) [not examined]. **Syn.n.**

Although Hübner did not give the type-locality, his figures match the only Eastern North American species. DYAR (1937) synonymized *scapha* (Harris), described from Massachussets, with *badia* and regarded *argentimacula* Barnes & McDunnough as a form of it. Genitalia of *badia* from Massachussets match those of *apsorrhoa*. Specimens from Guatemala and Veracruz, whose genitalia match the genitalia of the lectotypes of *apsorrhoa*, also resemble a hand colored photograph of the type od *scaphoides* (USNM). *P. apsorrhoa* and *scaphoides* were previously synonymized under *P. undifera* Walker, discussed below.

Prolimacodes trigona (Hy. Edwards)

Limacodes trigona Hy. Edwards, 1882:12. Holotype male, USA: Arizona, Prescott (Doll) (USNM) [examined].

Prolimacodes dividua Dyar, 1907:567. Lectotype male, MEXICO: Cuernavaca, viii.1906 (Schaus) (USNM, 10341), here designated [examined]. **Syn.n.**

Male genitalia of the paralectotype of *dividua* match those of specimens of *trigona* from S. Arizona and Chihuahua. The forewings in the Arizona *trigona* often have less silvery-white scales, especially in the submarginal border of the triangulate patch, compared to an undulating white line in *dividua*.

Prolimacodes undifera (Walker)

Limacodes undifera Walker, 1855:1149. Holotype female [listed as male], HONDURAS: [no further data] (Miller) (BMNH) [examined].

This species may either be a synonym of *trigona* or *badia*. The triangulate spot on the forewing of the holotype is marked by an undulating white line on the outer margin, similar to *dividua*. However, the basal portion of the triangle angled towards the costa as in *badia*.

Semyra Walker

Semyra Walker, 1855:1130. Type-species: **Semyra coarctata** Walker, 1855:1131, by subsequent designation by Kirby, 1892:534.

Clamara Walker, 1855:1099. Type-species: **Clamara terminata** Walker, 1855:1099, by monotypy. **Syn.n.**

Surida Walker, 1855:1145. Type-species: **Surida incisa** Walker, 1855:1145, by monotypy. **Syn.n.**

According to WALKER's descriptions, there is no doubt that the type-species of the two genera here synonymized belong in *Semyra* as discussed below. WALKER's generic description of *Surida* as having antennae with pectinations "broadest in the middle" also gives strong support of this synonymy. Along with *Eulimacodes* Möschler, there are now three synonyms under *Semyra*.

Although *Clamara* Walker has page priority over *Semyra* Walker, we choose to maintain *Semyra* in accordance with the first revisor's rule (Article 24a, ICZN). Since Walker's description, *Clamara* has only appeared in DYAR (1905) (to mention that it was lost) and in FLETCHER & NYE (1982). *Semyra* has been used in DYAR (1905, 1937), EECKE (1925) and other publications on New World Limacodidae .

Semyra coarctata Walker **stat.rev.**

Semyra coarctata Walker, 1855:1131. Holotype male, BRAZIL: Rio de Janeiro (BMNH) [examined].

Semyra finita Walker, 1855:1131. Holotype male, HONDURAS: [no further data] (Dyson) (BMNH) [examined].

Eulimacodes moeschleri Schaus, 1892:324. Holotype female, MEXICO: Jalapa (Schaus) (USNM,

9117) [examined].

EECKE (1925) and FLETCHER & NYE (1982) considered *Semyra coarctata* to be a synonym of *S. bella* (Herrich-Schäffer). This may have been based, at least in the latter, on fig. 181 in HERRICH-SCHÄFFER (1854), which resembles either species. However, we found the hand colored photograph of *bella* type in the USNM to best match specimens labelled *bella* in the USNM collection. These specimens are clearly distinct from *coarctata* in forewing width (narrower), color pattern and in the male genitalia.

EECKE (1925) synonymized *finita* Walker and *moeschleri* Schaus, along with *coarctata*, under *bella*. We agreee with DYAR (1937), who considered *finita* and *moeschleri* as synonyms, both under *coarctata* as a "northern form".

Semyra incisa (Walker), **comb.n.**

Surida incisa Walker, 1855:1145. Holotype male, BRAZIL: Rio de Janeiro [no further data] (Fry Col.) [presumably lost].

Semyra cardia Schaus, 1894:236. Holotype male, BRAZIL: Paraná, Castro (Schaus) (USNM, 9118), [examined]. **Syn.n.**

Semyra paula Dyar, 1905:374. Lectotype male, PERU: [no further data] (USNM, 8982), here designated [examined]. **Syn.n.**

Semyra eucharista Dyar, 1912:95. Holotype female, BRAZIL: [no further data] (USNM, 14082) [examined]. **Syn.n.**

Semyra phrygia Dyar, 1921:192. Holotype male, BRAZIL: São Paulo, 24.x.1915 (USNM, 24874) [examined]. **Syn.n.**

Semyra erna Dyar, 1927:549. Lectotype male, PARAGUAY: Villa Rica (Schade) (USNM, 40699), here designated [examined]. **Syn.n.**

WALKER (1855) described *incisa* as having forewings with "blackish undulating stripe in front of the middle partly bordered with white; a silvery subclavate mark in the disk near the base...underside with whitish subapical lunule.". The undulating stripe most clearly matches *cardia* and the other species here synonymized, whereas the other characters match *Semyra*. The genitalia of the types of *phrygia* and *erna*, as well as those of specimens which match both *paula* and *cardia*, all represent one species. The type of *eucharista* is the female of form *phrygia*.

Some of the overspliting in this species was probably due to variation in hindwing color, ranging from light yellow in *cardia* to dark brown in *eucharista*.

Semyra terminata (Walker), **comb.n.**

Clamara terminata Walker, 1855:1099. Holotype female, BRAZIL: Rio de Janeiro [no further data] (Fry Col.) [presumably lost].

Semyra zinie Dyar, 1905:374. Holotype female, PARAGUAY: Sapucay (Forster) (USNM, 9032) [examined]. **Syn.n.**

"Fawn" colored border along the outer margin as described by WALKER is unique in *Semyra*. Genitalia from a male specimen matching the type of *zinie* from Brazil: Goiás (LACM) shows that this is a distinct species.

Talima Walker

Talima Walker, 1855:1120. Type-species: **Talima postica** Walker, 1855:1121, by monotypy.

Agisa Walker, 1855:1129. Type-species: **Agisa rufoflava** Walker, 1855:1129, by monotypy. **Syn.n.**

Agisa is clearly congeneric with *Talima*.

See discussion under *rufoflava*.

Talima assimilis (Dyar)

Sisyrosea assimilis Dyar, 1905: 376. Holotype female, MEXICO: Jalapa (Schaus) (USNM, 8986) [examined].

Euclea fuscipars Dyar, 1918: 366. Holotype female, MEXICO: ["prob. Veracruz"] (Müller) (USNM, 21307) [examined]. **Syn.n., comb.n.**

Not included in DYAR (1935), *fuscipars* matches *assimilis* in wing pattern and size, and is sympatric.

Talima ingenour Dyar

Talima ingenour Dyar, 1926:84. Holotype male, FRENCH GUIANA: St. Jean, Maroni River (Schaus) (USNM, 28941) [examined]

The three male paratypes from Colombia in the type series of *ingenour* are misidentified. Genitalic preparation of the two specimens (USNM, coll. Dognin, "Yuntas pres Cali") matches the genitalia of the holotype of *Talima aurora* Dyar, 1926:84. The third specimen (USNM, coll. Fassl, Colombia), undissected, appears to match the other two. Genitalia of a paratype of *ingenour* from the type locality are clearly distinct from the type of *aurora*.

Talima postica Walker

Talima postica Walker, 1855:1121. Holotype male, VENEZUELA: [no further data] (BMNH) [examined].

Talima filifera Dyar, 1926:85. Lectotype male, GUYANA: Omai (Schaus) (USNM, 28944), here designated [examined]. **Syn.n.**

Talima insulla Dyar, 1927:548. Lectotype male, BRAZIL: Amazonas, Rio Solimões, below Codajás, 6.ix.1920, Cornell Univ. Exp., (USNM, 40691), here designated [examined]. **Syn.n.**

Genitalic preparations of the lectotypes of *insulla* and *filifera* match those of a specimen from Trinidad, with the same habitus as the type of *postica*. These two new synonyms were distinguished from *postica* by DYAR on the basis of the forewing submarginal line being more distinct in *filifera* and less so in *insulla*.

Talima rufoflava (Walker), **comb.n.**

Agisa rufoflava Walker, 1855:1129. Lectotype male, BRAZIL: Rio de Janeiro (Fry Col.) [presumably lost].

Nyssia sulla Schaus, 1892:324. Holotype male, BRAZIL: Rio de Janeiro, Petrópolis (USNM, 9115)

[examined]. **Syn.n.**

Talima ieco Dyar, 1926:85. Lectotype male, BRAZIL: Paraná, Castro (Schaus) (USNM, 28943, here designated [examined]. **Syn.n.**

Walker described *rufoflava* as having red forewings, yellow hindwings with a brown spot on the inner margin, and "9 lines.". This combination of size and color only compare with *sulla* and *ieco* of limacodid species found in the Atlantic forests of Brazil. Genitalia of the types of *sulla* and *ieco* are conspecific.

Talima samula (Druce), **comb.n.**

Grotella samula Druce, 1895:39. Holotype female, MEXICO: [no further data] (BMNH) [examined].

This species is first recognized here as a limacodid, transferred from the Noctuidae. It is placed in *Talima,* related to the *straminea* and *assimilis* complexes (EPSTEIN, in prep.).

Talima straminea (Schaus)

Semyra straminea Schaus, 1892:324. Holotype female, MEXICO: Veracruz, Rinconada (Schaus) (USNM, 9116) [examined].

Talima sissypha Dyar, 1927:548. Holotype male, GUATEMALA: San Sebastian, Retalhuleu (Thiele) (USNM, 40688) [examined]. **Syn.n.**

Male genitalic preparations of male *straminea* from Mexico, near the type locality of Veracruz and San Luis Potosi, and El Salvador, match the brushed valvae of the holotype of *sissypha*. The unsplit valva in *straminea* is clearly distinct from the distally divided valva in *Talima aurora* Dyar and *T. ingenour* Dyar. Dense pads of sensory setae surrounding the ostium bursae of the female genitalia in *straminea* clearly distinguishes it from *aurora* (*ingenour* remains unstudied in this respect).

Tanadema mas Dyar

Tanadema mas Dyar, 1905:392. Lectotype male, FRENCH GUIANA: St. Jean, Maroni River (USNM, 9008), here designated [examined]

Tanadema foemina Dyar, 1905:392. Lectotype male, FRENCH GUIANA: St. Jean, Maroni River (USNM, 9009), here designated [examined]. **Syn.n.**

Genitalia of both lectotypes are identical.

Tanadema neutra Dyar

Tanadema neutra Dyar, 1908:51. Lectotype male, COSTA RICA: Tuis (Schaus) (USNM, 11542), here designated [examined].

Tanadema nora Dyar, 1937:1133. Lectotype male, COLOMBIA: Juntas Rio Tamana [and] Rio San Juan, 405 ft, ii.1909 (Dognin) (USNM, 40770) here designated [examined]. **Syn.n.**

Genitalia of the lectotype of *nora* and the paralectotype of *neutra* from Costa Rica (Sixaola River) are identical.

Ulamia dolobrata (Stoll)

Phalaena dolobrata Stoll, 1780:34. Type(s), SURINAM: [no further data] [presumably lost].

Amydona sericea Schaus, 1892:324. Holotype male, PERU: [no further data] (Schaus) (USNM, 9130) [examined]. **Syn.n.**

The type of *sericea* is only a specimen with darker forewings than normal.

Vipsania melanois (Dyar)

Pseudovipsania melanois Dyar, 1912:98. Holotype male, COSTA RICA: Tuis, viii.1909 (Schaus) (USNM, 14092) [examined].

Vipsania schultzei Hering & Hopp, 1927: 185. Holotype male, COLOMBIA: Rio Magadalena, 20.xii.1920 (Schultze) (Col. Hopp?) [not examined]. **Syn.n.**

Genitalic preparations of male specimens from Costa Rica (USNM) and western Ecuador (BMNH), south of the type locality of *schultzei*, are of the same species. A color figure in the USNM of the type of *schultzei* closely matches the type of *melanois*, with characteristic red-tipped abdomen. *V. unicolor* Dyar may be the female of *schultzei* [=*melanois*] (Dyar, 1937).

MEGALOPYGIDAE
Megalopyginae

Megalopyge basalis (Walker), **comb.n.**

Agisa? basalis Walker, 1856 [10 May]:1757. Holotype male, BRAZIL: Rio de Janeiro (Stephens Col.) [presumably lost].

Ochrosoma apicalis Herrich-Schäffer, [1856]:pl. [91], figs 517, 518. Lectotype male, [fig. 517], [no further data], here designated [not examined]. **Syn.n.**

Zebonda basigutta Walker, 1865:498. Holotype male, BRAZIL: Rio de Janeiro (BMNH) [examined]. **Syn.n.**

This is the only species in the Atlantic forests of Brazil that has a forewing with both a white dot at base on the male, and yellow along the apical third of the costa, as described by WALKER for both *basalis* and *basigutta*.

Megalopyge globulus (Dognin), **comb.n.**

Hydrias globulus Dognin, 1894:94. Holotype male, ECUADOR: Loja, 1890 (Gaujon) (USNM, 29856) [examined].

This species was described in the Lasiocampidae and apparently has not been referred to in any of the major works on the family since then. HEINRICH was aware of its proper family placement, placing it with the Megalopygidae in the USNM collection.

Megalopyge radiata Schaus

Megalopyge radiata Schaus, 1892:322. Holotype female, BRAZIL: Rio de Janeiro, Petrópolis (USNM, 12536) [examined].

Megalopyge flavivertex Schaus, 1921:178. Holotype male, BRAZIL: São Paulo, Mato do Governo, i.1921 (Pohl) (USNM, 24928) [examined]. **Syn.n.**

M. flavivertex was regarded by HOPP (1935) as a form of *radiata*, the former with yellow on the vertex where the other is white. The type of *flavivertex*, the only labelled USNM specimen, occurs between the two localities for *M. radiata*, Nova Teutonia and Petrópolis.

Podalia amarga (Schaus), **stat.rev.**

Cyclara amarga Schaus, 1905:337. Holotype male, FRENCH GUIANA: St. Jean, Maroni River (Schaus) (USNM, 8926) [examined].

Gois nigrescens Schaus, 1905:338. Holotype male, GUYANA: Omai (USNM, 8927) [examined]. **Syn.n.**

Megalopyge farmbri Kaye, 1925:423. Holotype female, TRINIDAD: San Fernando, 23.xi.1917 (Farmborough) (BMNH) [examined]. **Syn.n.**

P. amarga, nigrescens, and *farmbri* were synonymized under *dimidiata* Herrich-Schäffer by HOPP (1935). Although similar in appearance (see differences under *dimidiata* below), these species are presumably not sympatric. Specimens of *amarga* in the USNM and Becker collections range from Costa Rica South to the Atlantic tropical coast of Bahia. Specimens of *dimidiata* are from Rio de Janeiro South to Parana. *P. amarga* is chosen as the senior synonym since it has page priority and its holotype is in better condition.

Podalia annulipes (Boisduval), **comb.n.**

Bombyx annulipes Boisduval, 1833:87. Holotype male, BOURBON ISLAND [Indian Ocean] (Buquet) (BMNH) [examined].

Malmis interlineata Dyar, 1928:10. Holotype male, BRAZIL: Minas Gerais, Lassance, 15.xi.1919 (Harris) (Cornell Univ., 895) [not examined]. **Syn.n.**

It is certain that the type of *annulipes* is mislabelled. This species is from Brazil [series in Becker collection from Distrito Federal: Planaltina and Minas Gerais]. *M. interlineata* has been synonymized with *lanocrispa* Jones (HOPP, 1935), but both are distinct species.

Podalia contigua (Walker)

Alpis contigua Walker, 1866:1935. Holotype male, COLOMBIA: Bogota (BMNH) [examined].

Alpis salacia Druce, 1887:210. Holotype male, COSTA RICA: Irazu, 6000 to 7000 ft (Rogers) (BMNH) examined]. **Syn.n.**

Megalopyge montana Schaus, 1910:416. Holotype male, COSTA RICA: Juan Viãas (Schaus) (USNM) [examined]. **Syn.n.**

DRUCE (1887) incorrectly identified a specimen of *habitus* from Gua-

temala as *contigua* and later (1897) synonymized the two under *contigua*. We have examined both types and found them to be distinct species. One specimen from Costa Rica (Volcán Turrialba, 1800m, Col. Becker) was compared with and matched the types of *contigua, salacia,* and *montana*. The type of *contigua* is in a very poor condition, but is still recognizable.

Podalia dimidiata (Herrich-Schäffer)

Limacodes dimidiatus Herrich-Schäffer, [1856]:pl. [90], fig. 513. Holotype female, BRAZIL: [no further data] [Rio de Janeiro] (MNHU) [not examined].

Repnoa arpi Schaus, 1915:9. Holotype male, BRAZIL: Nova Friburgo (USNM, 18515) [examined]. **Syn.n.**

The Herrich-Schäffer figure of *dimidiata* has a contrasting tan border that is wider than those found in the types of *amarga* and *nigrescens* (see above). Female specimens from the Atlantic forests of Brazil in the Becker and USNM collections closely match the Herrich-Schaeffer figure and are most likely conspecific with males from the region that match the type of *arpi*..We suspect that the type locality of *dimidiata* is Rio de Janeiro because most of Herrich-Schäffer's species described from Brazil in the same work belong to this fauna. Likewise, only places in this vicinity were collected in the region at this time.

Podalia habitus (Hy. Edwards), **stat.rev.**

Bombyx habitus Hy. Edwards, 1887:91. Holotype male, MEXICO: Veracruz (Schaus) (AMNH) [examined].

As explained under *contigua*, this is a different species, not a synonym of the latter as regarded by DRUCE (1897) and HOPP (1935). Hopp's figure of *montana* (pl. 163, row e) is a good representation of *habitus*.

Podalia intermaculata (Dognin)

Bedalia intermaculata Dognin, 1916:22. Lectotype male, Madre de Dios, 500-1200m (Fassl) (USNM, 29833), here designated [examined].

Bedalia vicina Hopp, 1926:197. Holotype male, COLOMBIA: Villa Vicencio (Fassl) (MNHU) [not examined]. **Syn.n.**

The types of *intermaculata* in the USNM collection closely match the figure of *vicina* Hopp from SEITZ. Genitalia slides by Heinrich of the paralectotype of *intermaculata* from Peru and *vicina* from Rio de Janeiro appear to be the same and match the illustration of the latter in HOPP (1926). It is unclear whether this figure belongs to the holotype of *vicina* or another specimen. Hopp mentions a specimen of *vicina* from Rio de Janeiro. The synonymy makes geographical sense, since type localities are on the east side of the Andes.

Podalia marmorata (Rothschild), **comb.n.**

Antarctia marmorata Rothschild, 1910:178. Holotype male, PERU: Carabaya, Oconeque (Ockenden) (BMNH) [examined].

Podalia cirrata Hopp, 1935. Holotype male, PERU: Carabaya, San Domingo, (Ockenden) (BMNH) [examined]. **Syn.n.**

Both types come from nearly the same type locality. *P. marmorata* was described in the Arctiidae.

Psychagrapha Walker

Psychagrapha Walker, 1855:957. Type-species: **Psychagrapha floccosa** Walker, 1855:957, by monotypy.

This genus was described in the Psychidae and transferred to Megalopygidae by FLETCHER & NYE (1928:138).

The female holotype of *floccosa* is an unmarked, grey moth, presumably belonging to the *dimidiata* species group, currently in *Podalia*. It is not synonymized under *Podalia* because this genus as well as *Megalopyge* need revision.

Trosiinae

Aithorape roseicornis (Dognin)

Carama roseicornis Dognin, 1899:134. Holotype male, COLOMBIA: Popayan, 1897 (USNM, 29847) [examined].

Carama flammicornis Schaus, 1905:334. Holotype male, SURINAM: Geldersland, Surinam River (Schaus) (USNM, 8913) [examined]. **Syn.n.**

A male from Colombia, the type locality of *roseicornis* was dissected and its genitalia is identical to those of the type of *flammicornis*. The synonymy of *A. bella* Druce with *roseicornis* (Hopp, 1934:1075) appears correct.

Coamorpha glutina (Schaus), **stat.rev.**

Vescoa glutina Schaus, 1920:146. Holotype male, GUATEMALA: Cayuga (Schaus) (USNM, 22482) [examined].

This species has been synonymized under *C. innoxia* (Schaus), however the genitalia are distinct.

Hysterocladia ignicornis (Schaus)

Trosia ignicornis Schaus, 1905:335. Holotype male, FRENCH GUIANA: St. Jean, Maroni River (Schaus) (USNM, 8916) [examined].

Trosia lena Schaus, 1912:56. Holotype male, COSTA RICA: Juan Viãas, Cachi (Schaus) (USNM) [examined]. **Syn.n.**

The genitalia of both types are identical. Figure 47 in HOPP (1927)

matches the genitalia of both types, whereas fig. 46 does not represent *ignicornis,* rather a misidentified specimen, presumably a form, possibly of *werneri* Hopp.

Trosia Hübner

Trosia Hübner, [1820]:196. Type-species: **Bombyx tricolora** Fabricius, 1787:114, by subsequent designation by DYAR, 1910:169.

There are more than 20 names in this genus, most of them have been regarded by HOPP (1935:1081-1082) as forms, aberrations, or subspecies of *dimas* (Cramer) and *punctigera* (Stoll). Most of these forms are widely spread and many are sympatric. Therefore, they cannot be considered subspecies.

They are either discrete forms of the same species, whose genetics and biology would be interesting to elucidate, or they are different species. Their genitalia are almost alike throughout the group, however, on external characters they are quite easy to separate. Taking this into account, it has been decided here to consider all these names as valid specific names. Certainly some of them are synonyms, but this can be sorted out only after a good revision and a careful study of their types. In the Nomenclature Synopsis there is a list of the names currently included in this genus.

LASIOCAMPIDAE

Euglyphis punctata (Walker), **comb.n.**

Amydona punctata Walker, 1855:1111. Holotype male, BRAZIL: Riode Janeiro [no further data] (Fry Col.) [presumably lost].

Ocha falsa Schaus, 1894:238. Lectotype male, BRAZIL: Paraná, Castro (USNM), here designated [examined]. **Syn.n.**

The large spot on the cell, row of submarginal spots and the pale ferrugineous color, and narrow zigzag bands on each side of the medial band, as described by WALKER, fits no known Limacodidae from this region, and leaves little doubt that WALKER's type belong to this species of Lasiocampidae.

There are long series of specimens in both the USNM and Becker collections.

Laruma heterogenea Walker

Laruma heterogenea Walker, 1855:1115. Holotype male, VENEZUELA: [no further data] (UMO) [not examined].

Schaus (1896:634) synonymized *Laruma* with *Hydrias* Herrich-Schäffer, currently a synonym of *Euglyphis* Hübner (Lasiocampidae). This synonymy has been overlooked by all subsequent workers including Fletcher & Nye (1982:87), who retained it in the Limacodidae. In the USNM collection there is a color figure of the type ordered by SCHAUS, and a series of reared specimens from Venezuela (Distrito Federal, Bajo Seco) which closely match the type figure.

The species without doubt is a true Lasiocampidae, however, on external characters it does not appear to be congeneric with *claudia* (Stoll), the type species of *Euglyphis*. Therefore, we maintain *Laruma* as valid genus in the Lasiocampidae.

ARCTIIDAE

Paracles Walker

Paracles Walker, 1855:717. Type-species: **Paracles contraria** Walker, 1855:717, by monotypy.
Renada Walker, 1855:771. Type-species: **Renada lateralis** Walker, 1855, by monotypy. **Syn.n.**

The genus *Renada* was originally described in the Arctiidae; it was placed in the Limacodidae by KIRBY (1892). DYAR (1905) listed *lateralis* as an unrecognized species and it has been regarded as such since then. We believe that WALKER (1855) was correct in the first place. His description of *Renada* matches that of *Paracles*. With this, *Paracles* currently has eight junior synonyms (WATSON & GOODGER, 1986).

Paracles lateralis (Walker), **comb.n.**

Renada lateralis Walker, 1855:771. Holotype female, BRAZIL: Rio de Janeiro [no further data] (Fry Col.) [presumably lost].

According to the description, color, markings and size, it is very likely that this is the female of *P. fusca* Walker, a species widely distributed in southern Brazil and Argentina.

P. fusca have the only females in the genus bearing two marks in the cell, as described by Walker for *lateralis*.

Incertae Sedis

Niaca curvimargo Walker

Niaca curvimargo Walker, 1855:1157. Holotype male, BRAZIL: Rio de Janeiro [no further data] (Fry Col.) [presumably lost].

This could be either a small *Euglyphis* or a Nolidae.

Leucophobetron punctata (Druce)

Euclea? punctata Druce, 1901:435. Holotype male, COLOMBIA: Honda (Mus. Druce) [location unknown].

DYAR (1905) placed this species in *Leucophobetron* without having seen the type, which Druce himself was unable to find during a visit (DYAR, 1905). This species is probably not a limacodid (DYAR, 1905, EPSTEIN & MILLER, in press).

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