



Revised checklist of the tiger moths of the Continental United States and Canada

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Abstract

The checklist of the Arctiinae (generally treated as the Arctiidae previously) of the continental United States and Canada is revised, incorporating a number of corrections and changes to publication dates and nomenclature as presented in the recent checklist of Ferguson and Opler (2006). *Clemensia patella* (Druce) is revised to synonymy under *Clemensia albata* Packard, *Holarctia sordida* (McDunnough) is raised from synonymy under *H. cervini* (Fallou), and *Arachnis apachea* Clarke is transferred from synonymy under *Arachnis verna* Barnes & McDunnough to *Arachnis citra* Neumögen & Dyar. *Palaearctia* Ferguson is synonymized under *Holarctia* M. E. Smith. The North American taxa previously treated as the tribe Arctiini are segregated into the subtribes Arctiina and Spilosomina. The genera *Kodiosoma* Stretch and *Euerythra* Harvey, previously treated as Arctiini, are transferred to the subtribe Phaegopterina.

Key words: Checklist, tiger moths, United States, Canada

Introduction

The North American Arctiinae fauna was recently catalogued by Ferguson and Opler (2006), capturing many of the taxonomic changes in this group since the publication of the last comprehensive list (Franclemont 1983) nearly 25 years ago (Franclemont 1983; note that this paper follows the revised family-group nomenclature within Noctuoidea proposed by Lafontaine and Fibiger [2006], with the Arctiidae recognized as a subfamily of the Noctuidae, and previously delineated subfamilies equal to tribes, and tribes as subtribes). Due to uncertainty of publication dates in early taxonomic works, a number of errors in publication dates appeared in the Ferguson and Opler (2006) checklist, and the primary purpose of the present list is to rectify these errors before they become incorporated into subsequent publications. The numerous discrepancies in publication dates between Ferguson and Opler (2006) and the present checklist are not noted individually. Publication date discrepancies between Franclemont (1983) and those given herein are however noted. Palaearctic synonyms of species currently treated as having a Holarctic distribution are not included here, and the original orthography of species epithets are used. For a discussion of this matter, see Sommerer (2002). The occurrence in the U. S. of three species, *Virbia cetes* (Druce, 1897), *V. marginata* (Druce, 1885) and *Pseudohemihylea mansueta* (Henry Edwards) remains unsubstantiated (Ferguson & Opler 2006), and they are therefore not included in this list.

The publication dates for the works of R. H. Stretch, F. Walker, J. Hübner and F. E. Guérin-Méneville require clarification. The nine-part series of “Illustrations of the Zygaenidae and Bombycidae of North America” published by R. H. Stretch were published between July 1872 and December 1873 according to the title,

with the accepted dates of publication as 1872 for the first part (pages 1–184) and 1874 for the latter part (pages 185–242). The arctiine names proposed by Stretch in the latter part of his work should therefore be cited as [1874]. The 1864 volume of the “List of the Lepidopterous Insects in the Collection of the British Museum” by F. Walker was actually published the following year (Watson *et al.* 1980). The correct date for these names is therefore [1865]. Hemming (1937) restricted the publication dates for the works of Hübner, with a date range given for ambiguous dates. According to the rules of the International Code of Zoological Nomenclature (Article 21. 6), the latest date should be adopted as the accepted date of publication in the case of date ranges (International Commission on Zoological Nomenclature 1999). The taxa named by Guérin-Méneville in “Iconographie du règne animal de G. Cuvier” (Guérin-Méneville 1844) have variously been attributed to dates between 1831 to 1844, but as both Cowan (1971) and Sherborn (1922) conclude, this work was most likely published as one block in 1844. Accordingly, taxa named therein should be attributed to Guérin-Méneville 1844.

With the exception of the subtribe Arctiina (Arctiini *sensu* Franclemont 1983 and Ferguson & Opler 2006), the tribal and subtribal arrangement presented herein generally follows that of Watson and Goodger (1986), Kitching and Rawlins (1998), Bendib and Minet (2000), and Jacobson and Weller (2002), with the nomenclature adjusted to reflect the changes proposed by Lafontaine and Fibiger (2006). The Arctiina is segregated into the Arctiina *sensu stricto* and Spilosomina, with *Kodiosoma* Stretch and *Euerythra* Harvey transferred to the Phaegopterina, based on the results of Schmidt (2007). *Sonorarctia* Ferguson, previously associated with the *Phragmatobia* group of genera (Ferguson 1985), is more closely related to *Apantesis* Walker and is therefore placed in the Arctiina (Schmidt 2007).

The classification of the Callimorphina has recently been revised by DaCosta and Weller (2005), which we follow here. The “*Euchaetes* clade” (Jacobson & Weller 2002), included in the Callimorphini by Ferguson and Opler (2006), is placed in the Phaegopterina here, following DaCosta and Weller (2005). Although Ferguson and Opler (2006) included 10 genera under the *Euchaetes* clade, only *Euchaetes*, *Cycnia* and *Ectypia* were included by Jacobson and Weller (2002), and DaCosta *et al.* (2006) subsequently showed that *Pygarctia* and *Pygoctenucha* are also part of this group, but that *Pareuchaetes* is not. *Kodiosoma*, previously placed in the Arctiina, is also allied to *Cycnia* (Schmidt 2007), and we therefore place all *Euchaetes* group genera together at the end of the Phaegopterina. Until affinities of the remaining phaegopterine genera are better understood, we maintain the sequence of genera as previously established (Franclemont 1983), with newly transferred genera placed prior to the *Euchaetes* group.

In summary, the following recent changes in our understanding of arctiine phylogeny have resulted in the following taxonomic changes:

- Arctiidae re-classified as subfamily of Noctuidae (Lafontaine & Fibiger 2006), with subfamilies and tribes relegated to tribes and subtribes, respectively.
- The Arctiinae (*sensu* Lafontaine & Fibiger 2006) consist of three tribes i.e., Syntomini, Lithosiini and Arctiini, corresponding to the subfamilies recognized by Kitching and Rawlins (1998) and Jacobson and Weller (2002).
- Syntomini are not related to the Ctenuchina and Euchromiina (Kitching & Rawlins 1998), and are not known to occur in the New World. Ctenuchina and Euchromiina are treated as subtribes of the Arctiini (Kitching & Rawlins 1998; Jacobson & Weller 2002).
- The following taxa have previously been removed from the Lithosiini:
 - o Afridini, consisting of *Afrida* Möschler, is tentatively included in the Noctuidae: Nolinae (Lafontaine & Fibiger 2006), following Kitching and Rawlins (1998). “*Afrida*” *exegens* Dyar is not congeneric with *Afrida* (*sensu stricto*), and is currently unplaced within the Arctiini (Ferguson & Opler 2006).
 - o *Comachara* Franclemont has been transferred to Noctuidae: Acronictinae (Wagner *et al.* 2006).

- *Pagara* Walker – the two North American species listed by Franclemont (1983) were arranged by Ferguson and Opler (2006) as follows: *Pagara simplex* Walker (Callimorphini: *Euchaetes* clade) and *Trocodima fuscipes* Grote (Phaegopterini). Both species are here included in the Phaegopterina, as discussed above with respect to the *Euchaetes* clade.
- *Neoplynes* Hampson transferred to Phaegopterina (Ferguson & Opler 2006)
- The *Euchaetes* group of genera, consisting of *Euchaetes*, *Cycnia*, *Pygarctia*, *Pygoctenucha*, and *Ectypia* (DaCosta *et al.* 2006) included in the Callimorphina by Ferguson and Opler (2006) are here placed in the Phaegopterina (DaCosta & Weller 2005).
- The tribe Doaini (Arctiidae: Pericopinae, *sensu* Franclemont 1983) was raised to family status by (Donahue & Brown 1987).

Checklist

LITHOSIINI

ACSALINA

ACSALA Benjamin, 1935

1. *anomala* Benjamin, 1935

EUDESMIINA

EUDESMIA Hübner, [1823]

RUSCINO Walker, 1854

GERBA Walker, [1865]

2. *arida* (Skinner, 1906)

3. *menea* (Drury, 1782)

laetifera (Walker, [1865])

latifasciatus (Butler, 1875)

CISTHENINA

CISTHENE Walker, 1854

ILLICE Walker, 1859

PYRALIDIA Felder, 1868

BYSSOPHAGA Stretch, 1872

OZODANIA Dyar, 1899

4. *subrufa* (Barnes & McDunnough, 1913)

5. *unifascia* Grote & Robinson, 1868

ruptifascia (Barnes & McDunnough, 1918)

mexicana (Draudt, 1918)

6. *kentuckiensis* (Dyar, 1904)

7. *liberomacula* (Dyar, 1904)

basijuncta (Barnes & McDunnough, 1918)

8. *deserta* (Felder, 1868)

nexa (Boisduval, 1869)

grisea (Packard, 1872)

9. *faustinula* (Boisduval, 1869)

fusca Stretch, 1872

10. *dorsimacula* (Dyar, 1904)

11. *tenuifascia* Harvey, 1875

interrupta (Draudt, 1918)

- a. *schwarziorum* (Dyar, 1899)
- 12. *plumbea* Stretch, 1885
 - injecta* (Dyar, 1904)
 - gamma* (Dyar, 1904)
 - flavicosta* (Draudt, 1918)
- 13. *striata* Ottolengui, 1898
 - apicipicta* (Strand, 1922)
- 14. *perrosea* (Dyar, 1904)
- 15. *angelus* (Dyar, 1904)
- 16. *subjecta* Walker, 1854
 - bellicula* (Dyar, 1921)
- 17. *packardii* (Grote, 1863)
- 18. *conjuncta* (Barnes & McDunnough, 1913)
- 19. *barnesii* (Dyar, 1904)
 - flavula* (Barnes & McDunnough, 1918)
 - costimacula* (Draudt, 1918)
 - flava* (Draudt, 1919)
- 20. *picta* (Barnes & McDunnough, 1918)
 - texensis* (Draudt, 1918)
- 21. *juanita* Barnes & Benjamin, 1925
- 22. *coronado* C. B. Knowlton, 1967
- 23. *martini* C. B. Knowlton, 1967

PTYCHOGLENE Felder, 1868

- 24. *coccinea* (Henry Edwards, 1886)
- 25. *phrada* Druce, 1889
 - flammans* Dyar, 1898
- 26. *sanguineola* (Boisduval, 1870)

PROPYRIA Hampson, 1898

- 27. *schausi* (Dyar, 1898)

LYCOMORPHA Harris, 1839

- PREPODES* Herrich-Schäffer, 1855
- ANATOLMIS* Packard, 1864
- 28. *grotei* (Packard, 1864)
 - palmerii* Packard, 1872
 - a. *pulchra* Dyar, 1898
- 29. *regulus* (Grinnell, 1903)
- 30. *fulgens* (Henry Edwards, 1881)
 - tenuimargo* Holland, 1903
- 31. *splendens* Barnes & McDunnough, 1912
- 32. *pholus* (Drury, 1773)
 - a. *miniata* Packard, 1872
- 33. *desertus* Henry Edwards, 1881

HYPOPREEPIA Hübner, [1831]

- 34. *miniata* (Kirby, 1837)
 - vittata* (Harris, 1841)
 - a. *mississippiensis* Barnes & Benjamin, 1926
- 35. *fucosa* Hübner, [1831]
 - a. *subornata* Neumögen & Dyar, 1893
 - inornata* Ottolengui, 1895
 - dollii* Dyar, 1906
 - b. *tricolor* (Fitch, 1856)
 - plumbea* Henry Edwards, 1886
- 36. *cadaverosa* Strecker, 1878
- 37. *inculta* Henry Edwards, 1882

HAEMATOMIS Schaus, 1899

38. *uniformis* Schaus, 1899
mexicana of authors (not Druce, 1885)

RHABDATOMIS Dyar, 1907

39. *laudamia* (Druce, 1885)

LYCOMORPHODES Hampson, 1900

40. *sordida* (Butler, 1877)

BRUCEIA Neumögen, 1893

41. *pulverina* Neumögen, 1893
42. *hubbardi* Dyar, 1898

CLEMENSIA Packard, 1864

- UXIA* Walker, 1866
REPA Walker, 1866
43. *albata* Packard, 1864
albida (Walker, 1866)
cana (Walker, 1866)
patella (Druce, 1885) **revised status**¹
a. *umbrata* Packard, 1872
irrorata Henry Edwards, 1873

Subtribal placement uncertain:

EILEMA Hübner, [1819]

44. *bicolor* (Grote, 1864)
argillacea (Packard, 1864)

CRAMBIDIA Packard, 1864

45. *lithosioides* Dyar, 1898
46. *pallida* Packard, 1864
47. *uniformis* Dyar, 1898
48. *dusca* Barnes & McDunnough, 1913
49. *myrlosea* Dyar, 1917
50. *suffusa* Barnes & McDunnough, 1912
51. *impura* Barnes & McDunnough, 1913
52. *casta* (Packard, 1869)
candida (Henry Edwards, 1873)
53. *pura* Barnes & McDunnough, 1913
54. *cephalica* (Grote & Robinson, 1870)

AGYLLA Walker, 1854

- SALAPOLA* Walker, 1863
CRAMBOMORPHA Felder, 1874
MACROCRAMBUS Kirby, 1892
55. *septentrionalis* Barnes & McDunnough, 1911

INOPSIS Felder, 1874

56. *modulata* (Henry Edwards, 1884)
metella (Druce, 1885)
scylla (Druce, 1885)
57. *funerea* (Grote, 1883)

1. Inadvertently listed as a distinct species by Ferguson and Opler (2006). Morphological and molecular data indicate that west coast and boreal populations of *C. albata* are conspecific (BCS, unpubl. data).

GNAMPTONYCHIA Hampson, 1900
58. *ventralis* Barnes & Lindsey, 1921

GARDINIA Kirby, 1892
GARDINICA Strand, 1932
59. *anopla* Hering, 1925

ARCTIINI

ARCTIINA

- VIRBIA** Walker, 1854
HOLOMELINA Herrich-Schäffer, 1855
COTHOCIDA Walker, 1865
CYTORUS Grote, 1865
60. *laeta* (Guérin-Ménéville, 1844)
treatii (Grote, 1865)
rubropicta (Packard, 1887)
61. *costata* (Stretch, 1884)
opelloides (Graef, 1887)
intermedia (Graef, 1887)
parvula (Neumögen & Dyar, 1893)
cocciniceps (Schaus, 1901)
pallipennis (Barnes & McDunnough, 1918)
62. *ostenta* (Henry Edwards, 1881)
calera Barnes, 1907
63. *opella* (Grote, 1863)
obscura (Stretch, 1885)
belmaria (Ehrmann, 1895)
rubricosta (Ehrmann, 1895)
flava (Barnes & Benjamin, 1925)
64. *nigricans* (Reakirt, 1864)
nigrifera (Walker, 1865)
65. *lamae* (Freeman, 1941)
66. *aurantiaca* (Hübner, [1831])
brevicornis (Walker, 1854)
bimaculata (Saunders, 1869)
67. *rubicundaria* (Hübner, [1831])
belfragei (Stretch, 1885)
diminutiva (Graef, 1887)
rosa (French, 1890)
68. *ferruginosa* (Walker, 1854)
quinaria (Grote, 1863)
choriona (Reakirt, 1864)
trimaculosa (Reakirt, 1864)
buchholzi (Wyatt, 1963)
69. *immaculata* (Reakirt, 1864)
70. *fragilis* (Strecker, 1878)

- HOLOARCTIA** Ferguson, 1984
71. *sordida* (McDunnough, 1921) **revised status** ¹
72. *puengeleri* (Bang-Haas, 1927) [extralimital] ²
bicolor (Draudt, 1931)
immaculata (Draudt, 1931)

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1. Treated as a distinct species following Pöyry and Kullberg (1997).
 2. Nomenclature follows Pöyry and Kullberg (1997).

a. fridolini (Torstenius, 1971)

NEOARCTIA Neumögen & Dyar, 1893

73. **beanii** (Neumögen, 1891)

fuscosa (Neumögen, 1891)

74. **brucei** (Henry Edwards, 1888)

75. **lafontainei** Ferguson, 1985

HYPERBOREA Grum-Grshimailo, 1900

76. **czekanowskii** Grum-Grshimailo, 1900

czecanousci Hampson, 1920 [unjustified emendation]

HOLARCTIA M. E. Smith, 1938 **revised status** ¹

PALEARCTIA Ferguson 1985 **new synonymy**

77. **obliterata** (Stretch, 1885)

turbans (Christoph, 1892)

GRAMMIA Rambur, 1866 ²

ORODEMNIAS Wallengren, 1885

MIMARCTIA Neumögen & Dyar, 1894

78. **arge** (Drury, 1773)

dione (Fabricius, 1775)

incarnatorubra (Göze, 1781)

nervosa (Neumögen & Dyar, 1893)

strigosa (Stretch, 1906) [homonym]

79. **doris** (Boisduval, 1869)

nerea (Boisduval, 1869)

michabo (Grote, 1875)

a. **minea** (Slosson, 1892)

80. **phyllira** (Drury, 1773)

b-ata (Göze, 1781)

oithona (Strecker, 1878)

rectilinea (French, 1879)

dodgei (Butler, 1881)

conspicua (Stretch, 1906)

favoritella (Strand, 1919) **revised synonymy**

avoritella Ferguson & Opler (2006), misspelling

81. **placenticia** (J. E. Smith, 1797)

flammea (Neumögen, 1881)

82. **virgo** (Linnaeus, 1758)

citrinaria (Neumögen & Dyar, 1893)

simplex (Stretch, 1906)

83. **anna** (Grote, 1864)

persephone (Grote, 1864)

84. **parthenice** (W. Kirby, 1837)

saundersii (Grote, 1864)

approximata (Stretch, 1885)

circa (Stretch, 1906)

a. **intermedia** (Stretch, [1874])

stretchii (Grote, 1875)

85. **virguncula** (W. Kirby, 1837)

otiosa (Neumögen & Dyar, 1893)

1. Previously placed in the genus *Grammia*, *Arctia obliterata* Stretch is congeneric with *Palearctia* Ferguson (type species: *Arctia glaphyra manii* Alpheraky 1881), for which the name *Holarctia* M. E. Smith (type species: *Arctia turbans* Christoph 1892) has priority (Schmidt 2007).

2. Sequence of species follows approximate phylogenetic relationships as presented in Schmidt (2007).

86. *speciosa* (Möschler, 1864)
87. *philipiana* Ferguson, 1985
88. *quenseli* (Paykull, 1793)¹
strigosa (Fabricius, 1793)
gelida (Möschler, 1864)
89. *celia* (Saunders, 1863)
franconia (Henry Edwards, 1888)
90. *figurata* (Drury, 1773)
ceramica (Hübner, [1820])
snowi (Grote, 1875)
excelsa (Neumögen, 1883)
lugubris (Hulst, [1887])
preciosa (Nixon, 1911)
91. *f-pallida* (Strecker, 1878)
quadranotata (Strecker, 1878)²
sociata (Barnes & McDunnough, 1910)
moierra (Dyar, 1914)
92. *incorrupata* (Henry Edwards, 1881)³
ochracea (Neumögen, 1883) [homonym]
sulphurica (Neumögen, 1885)
geneura of authors, not Strecker, 1880
93. *allectans* Ferguson, 1985
94. *nevadensis* (Grote and Robinson, 1866)³
a. *geneura* (Strecker, 1880)
b. *superba* (Stretch, [1874])
c. *gibsoni* (McDunnough, 1937)
95. *behrii* (Stretch, 1872)
behri of authors, misspelling
96. *bolanderi* (Stretch, 1872)
97. *williamsii* (Dodge, 1871)
determinata (Neumögen, 1881)
a. *tooele* (Barnes & McDunnough, 1910)
ophir (Barnes & McDunnough, 1910)
confluentis (Strand, 1919) **revised synonymy**
98. *favorita* (Neumögen, 1890)
99. *elongata* (Stretch, 1885)
dieckii (Neumögen, 1890)
100. *bowmani* Ferguson & Schmidt 2007
101. *blakei* (Grote, 1864)
102. *cervinoides* (Strecker, 1876)
103. *ornata* (Packard, 1864)
achaia (Grote & Robinson, 1868)
ochracea (Stretch, 1872)
barda (Henry Edwards, 1881)
simplicior (Butler, 1881)
perpicta (Dyar, 1893)
maculosa (Stretch, 1906)
ochracearivulosa (Stretch, 1906)⁴
rivulosa (Stretch, 1906)
californica (Cassino, 1917)
hewletti (Barnes & McDunnough, 1918)

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1. Palearctic synonyms omitted.
 2. The correct date of publication is October 1878 according to Smith (1938), not 1880 (Franclemont 1983).
 3. nomenclature follows Ferguson & Schmidt (2007).
 4. An emendation of *ochracea-rivulosa* in accordance with Article 32. 5. 2. 2 of the International Code of Zoological Nomenclature (International Commission on Zoological Nomenclature 1999).

- sulphuricella* (Strand, 1919)
 104. **complicata** (Walker, [1865])
 105. **edwardsii** (Stretch, 1872)
edwardsi of authors, misspelling
 106. **eureka** Ferguson & Schmidt 2007

NOTARCTIA M. E. Smith, 1938

107. **proxima** (Guérin-Méneville, 1844)
docta (Walker, 1855)
mexicana (Grote & Robinson, 1867)
autholea (Boisduval, 1869)
 108. **arizoniensis** (Stretch, [1874])
mormonica (Neumögen, 1885)

APANTESIS Walker, 1855

109. **phalerata** (Harris, 1841)
incompleta (Butler, 1881)
rhoda (Butler, 1881)
incarnata (Stretch, 1906)
pulcherrima (Stretch, 1906)
naidella Strand, 1919
vittatula Strand, 1919
rhodana Strand, 1919
 110. **vittata** (Fabricius, 1787)
radians Walker, 1855
colorata (Walker, [1865])
 a. **floridana** Cassino, 1918
ochracea Cassino, 1918
subterminalis Strand, 1919
 111. **nais** (Drury, 1773)
cuneata (Göze, 1781)
decorata (Saunders, 1863)
ochreatea (Butler, 1881)
phaleratula Strand, 1919
 112. **carlotta** Ferguson, 1985

SONORARCTIA Ferguson, 1985

113. **fervida** (Walker, 1855)
commixta (Butler, 1877)
rodriguezii (Druce, 1890)

PARASEMIA Hübner [1820]

- NEMEOPHILA* Stephens, 1828
CHIONOPHILA Guenée, 1865
EUPSYCHOMA Grote, 1865
 114. **plantaginis** (Linnaeus, 1758) [extralimital]
 a. **petrosa** (Walker, 1855)
modesta (Packard, 1864)
scudderii (Packard, 1864)
scudderii of authors, misspelling.
geometrica (Grote, 1865)
caespitis (Grote & Robinson, 1868)
cichorii (Grote & Robinson, 1868)
geddesi (Neumögen, 1884)
selwynii (Henry Edwards, 1885)
alascensis (Stretch, 1906)

ACERBIA Sotavalta, 1963

115. **alpina** (Quensel, 1802) [extralimital]

thulea (Dalman, 1823)
a. *johanseni* (Bang-Haas, 1927)

PARARCTIA Sotavalta, 1965

116. *lapponica* (Thunberg, 1791) [extralimital]
festiva (Borkhausen, 1790) [homonym]
avia (Hübner, [1808])
a. *hyperborea* (Curtis, 1835)
b. *gibsoni* (Bang-Haas, 1927)
117. *yarrowii* (Stretch, [1874])
remissa (Henry Edwards, 1888)
118. *subnebulosa* (Dyar, 1899)

PLATARCTIA Packard, 1864

119. *parthenos* (Harris, 1850)
borealis (Möschler, 1860)
parvimaculata (Brower, 1973)
multimaculata (Brower, 1973)
obsolescens (Brower, 1973)

PLATYPREPIA Dyar, 1897

120. *virginalis* (Boisduval, 1852)
guttata (Boisduval, 1852)
ochracea (Stretch, 1872)

ARCTIA Schrank, 1802

- EYPREPIA* Ochseneimer, 1810
ZOOTE Hübner, [1820]
CALLARCTIA Packard, 1864
121. *caja* (Linnaeus, 1758) [extralimital]
a. *waroi* Barnes & Benjamin, 1927
b. *americana* Harris, 1841
c. *utahensis* (Henry Edwards, 1887)
transmontana (Neumögen & Dyar, 1893)
122. *opulenta* (Henry Edwards, 1881)
parva Rothschild, 1910
virginivir Dyar, 1923
123. *brachyptera* Troubridge & Lafontaine, 2000

SPILOSOMINA

PHRAGMATOBIA Stephens, 1828

124. *fuliginosa* (Linnaeus, 1758) [extralimital]
a. *rubricosa* (Harris, 1841)
dallii Packard, 1870
125. *lineata* Newman & Donahue, 1966
126. *assimilans* Walker, 1855
franconia Slosson, 1891

LEPTARCTIA Stretch, 1872

127. *californiae* (Walker, 1855)
lena (Boisduval, 1869)
adnata (Boisduval, 1869)
?melanis (Boisduval, 1869)
?californica Boisduval, 1869)
decia (Boisduval, 1869)
dimidiata Stretch, 1872
boisduvalii Butler, 1881

fulvofasciata Butler, 1881
latifasciata Butler, 1881
stretchii Butler, 1881
albifascia French, 1889
occidentalis French, 1889
wrightii French, 1889

PYRRHARCTIA Packard, 1864

128. *isabella* (J. E. Smith, 1797)
californica Packard, 1864

SEIRARCTIA Packard, 1864

129. *echo* (J. E. Smith, 1797)
niobe (Strecker, 1885)

ESTIGMENE Hübner, [1820]

LEUCARCTIA Packard, 1864

130. *acrea* (Drury, 1773)
caprotina (Drury, 1773)
pseuderminea (Harris, 1823)
californica (Packard, 1864)
mexicana (Walker, [1865])
packardii (Schaupp, 1882)
rickseckeri (Behr, 1893)
klagesii (Ehrmann, 1894)
acraea of authors, misspelling
131. *albida* (Stretch, [1874])
arizonensis Rothschild, 1910

HYPHANTRIA Harris, 1841

132. *cunea* (Drury, 1773)
liturata (Göze, 1781)
punctatissima (J. E. Smith, 1797)
budea (Hübner, [1822])
textor (Harris, 1841)
mutans (Walker, 1856)
punctata Fitch, 1857
pallida (Packard, 1864)
candida (Walker, [1865])
suffusa Strecker, 1900
brunnea Strecker, 1900

SPILOSOMA Curtis, 1825

RHAGONIS Walker, 1862¹

ELPIS Dyar, 1892 [junior homonym of *ELPIS* Mulsant, 1850]¹

132. *congrua* Walker, 1855
antigone Strecker, 1877
athena Strecker, 1899
133. *dubia* (Walker, 1855)
prima Slosson, 1889
134. *virginica* (Fabricius, 1798)
fumosa Strecker, 1900
135. *latipennis* Stretch, 1872
136. *vestalis* Packard, 1864
echo (Rothschild, 1910), in part
amelaina (Dyar, 1893)

1. Inadvertently omitted in Ferguson and Opler (2006).

137. *vagans* (Boisduval, 1852)
rufula (Boisduval, 1855)
bicolor (Walker, 1862)
punctata (Packard, 1864)
proba (Henry Edwards, 1881)
walsinghamii (Butler, 1881)
a. *kasloa* (Dyar, 1904)
138. *pteridis* Henry Edwards, 1875
rubra (Neumögen, 1881)
139. *danbyi* (Neumögen & Dyar, 1893)

ALEXICLES Grote, 1883

140. *aspersa* Grote, 1883

HYPERCOMPE Hübner, [1819]

ECPANTHERIA Hübner, [1820]

CATENINA Burmeister, 1883

141. *suffusa* (Schaus, 1889)
semiclara Stretch, 1906
142. *oslari* Rothschild, [1910]
143. *permaculata* (Packard, 1872)
reducta (Grote, 1877)
caeca (Strecker, 1885)
144. *scribonia* (Stoll, [1790])
chryseis (Olivier, 1790)
confluens Oberthür, 1881
denudata Slosson, 1888
145. *caudata* (Walker, 1855)
abscondens Oberthür, 1881
yukatanensis Oberthür, 1881
mexicana Oberthür, 1881
sennettii Lintner, 1884
muzina of authors [not Oberthür, 1881]

ARACHNIS Geyer, 1837

146. *picta* Packard, 1864
a. *insularis* Clarke, 1941
b. *meadowsi* Comstock, 1942
c. *maia* Ottolengui, 1896
hampsoni Dyar, 1903
147. *nedyma* Franclemont, 1966
148. *citra* Neumögen & Dyar, 1893
apachea Clarke, 1941, **new synonymy**¹
a. *verna* Barnes & McDunnough, 1918
midas Barnes & Lindsey, 1921
149. *aulaea* Geyer, 1837 [extralimital]
incarnata (Walker, 1855)
a. *pompeia* Druce, 1894
150. *zuni* Neumögen, 1890

CALLIMORPHINA

DODIA Dyar, 1901

HYALOCOA Hampson, 1901

151. *albertae* Dyar, 1901

1. This taxon was listed as a synonym of *verna* Franclemont by Ferguson and Opler (2006).

152. *kononenkoi* Tshistjakov & Lafontaine, 1984
153. *verticalis* Lafontaine & Troubridge, 2000

HAPLOA Hübner, [1820]

154. *clymene* (Brown, 1776)
interruptomarginata Palisot de Beauvois, 1821
comma (Walker, 1855)
155. *colona* (Hübner, [1803])
clymene (Esper, 1794) [homonym]
carolina (Harris, 1841)
fulvicosta (Clemens, 1860)
conscita (Walker, 1865)¹
lactata (Smith, 1887)
duplicata Neumögen & Dyar, 1893
156. *reversa* (Stretch, 1885)
suffusa (Smith, 1887)
157. *contigua* (Walker, 1855)
lumbonigera Dyar, 1902
158. *lecontei* (Guérin-Méneville, 1844)
militaris (Harris, 1841)
confinis (Walker, 1855)
leucomelas Herrich-Schäffer, 1855
vestalis (Packard, 1864)
albanchlora (Grote, 1888) [hybrid?]
harrisii Dyar, 1902
smithii Dyar, 1902
dyarii Merrick, 1903
ochroleuca Strand, 1919
suffusca Franclemont, 1938
159. *confusa* (Lyman, 1887)
triangularis, Smith, 1899
lymani Dyar, 1902

TYRIA Hübner, [1819]

- EUCHELIA* Boisduval, 1828
160. *jacobaeae* (Linnaeus, 1758)
senecionis (Godart, 1823)

UTETHEISA Hübner, [1819]

- DEIOPEIA* Curtis, 1827
161. *ornatrix* (Linnaeus, 1758)
stretchii (Butler, 1877)
pura (Butler, 1877)
daphoena (Dyar, 1914)
butleri Dyar, 1914
162. *bella* (Linnaeus, 1758)
venusta (Dalman, 1823)
speciosa (Walker, 1854)
hybrida (Butler, 1877)
intermedia (Butler, 1877)
terminalis Neumögen & Dyar, 1893
nova Smith, 1910
grossbecki Strand, 1919

PERICOPINA

1. Misspelled as *consata* in Ferguson and Opler (2006).

HYPOPCRITA Hübner, [1807]
EUCYANE Hübner, [1820]
ESTHEMA Hübner, [1820]
CALEPIDOS Boisduval, 1870
163. *escuintla* (Schaus, 1920)¹
esquirilla Hering, 1925 [incorrect subsequent spelling]

COMPOSIA Hübner, [1820]
COCASTRA Boisduval, 1870
164. *fidelissima* Herrich-Schäffer, 1866
olympia (Butler, 1871)
a. *vagrans* Bates, 1934
olympia French, 1890 (not Butler, 1871)

PHALOESIA Walker, 1854
165. *saucia* Walker, 1854
gentilis (Boisduval, 1870)²
fulvicollis Butler, 1876³
venezuelae Butler, 1876
chalybea Butler, 1876
chalybia Ferguson & Opler 2006, misspelling

GNOPHAELA Walker, 1854
OMOIALA Grote, [1864]
LAMPROSOMA Grote, [1864] [homonym]
CALLALUCIA Grote, 1865
166. *clappiana* Holland, 1891
ruidosensis Cockerell, 1904
167. *latipennis* (Boisduval, 1852)
hopfferi Grote & Robinson, 1868
hopferi Ferguson & Opler, 2006 [misspelling]
168. *aequinoctialis* (Walker, 1854)
disjuncta Henry Edwards, 1885
169. *discreta* Stretch, 1875
arizona French, 1884⁴
morrisoni Druce, 1885
170. *vermiculata* (Grote, 1863)
continua Henry Edwards, 1881

DYSSCHEMA Hübner, 1818⁵
HYELOSIA Hübner, 1818
PERICOPIS Hübner, [1819]
AMBRYLLIS Walker, 1855
DARITIS Walker, 1855
TAXILA Walker, 1855 [homonym]
ADDUA Walker, 1862
THEBRONE Boisduval, 1870
APHISAON Boisduval, 1870

1. Reported from Florida by Habeck (2007).

2. The name *immacula* (Boisduval, 1870) was apparently included in error by Ferguson and Opler (2006).

3. Erroneously listed as a synonym of *Gnophaela vermiculata* (Grote) in Watson and Goodger (1986).

4. Omitted in Ferguson and Opler (2006), who instead list *immacula* French, 1884 as a synonym. The latter name was never published, and was erroneously included.

5. The type species of *Hyelosia* Hübner, 1818 was subsequently designated as *Phalaena aglaura* Cramer, [1780] by Fletcher (1979), a junior subjective synonym of *Dysschema tricolor* (Sulzer, 1776) according to Watson and Goodger (1986), who also established usage priority of *Dysschema* over *Hyelosia*. *Hyelosia aglaura* (Cramer) is erroneously included in the Geometridae by Fletcher (1979) and Parsons et al. (1999).

- DORIMENA* Boisduval, 1870
AMBRYSIIS Burmeister, 1878
 171. *leucophaea* (Walker, 1854)
 rubrimargo (Boisduval, 1870)
 salvatoris (Boisduval, 1870)
 flora (Butler, 1873)
 172. *howardi* (Henry Edwards, 1887)

PHAEGOPTERINA ¹

- HYPOCRISIAS*** Hampson, 1901
 173. *minima* (Neumögen, 1883)
 armillata (Henry Edwards, 1884)
 agelia (Druce, 1890)

- HALYSIDOTA*** Hübner, [1819]
 174. *tessellaris* (J. E. Smith, 1797)
 antiphola Walsh, 1864
 oslari Rothschild, 1909
 175. *harrisii* Walsh, 1864
 176. *davisii* Henry Edwards, 1875 ²
 177. *schausi* Rothschild, 1909
 178. *cinctipes* Grote, 1865

- LOPHOCAMPA*** Harris, 1841
 EUHALISIDOTA Grote, 1865
 THALESA Schaus, 1896
 SCHAUSIA Dyar, 1897 [homonym]
 EUSCHAUSIA Dyar, 1898
 SYNARCTIA Hampson, 1901
 LEPIDONEWTONIA Rego-Barros, 1956

179. *roseata* (Walker, 1866)
 cinnamomea (Boisduval, 1869)
 sanguivenosa (Neumögen, 1892)
 a. *occidentalis* (French, 1890)
 180. *significans* (Henry Edwards, 1888)
 181. *ingens* (Henry Edwards, 1881)
 scapularis (Stretch, 1885)
 182. *argentata* (Packard, 1864)
 a. *subalpina* (French, 1890)
 183. *sobrina* (Stretch, 1872)
 184. *caryae* Harris, 1841
 annulifascia (Walker, 1855)
 porphyrea (Herrich-Schäffer, 1855)
 185. *mixta* (Neumögen, 1882)
 pseudocarye (Rothschild, 1909)
 186. *pura* (Neumögen, 1882)

1. The Phaegopterina are likely not a natural group, and much more work will be needed to determine relationships. Two relatively well-defined groups that have been placed in the Phaegopterina are the *Halysidota* group (Jacobson & Weller 2002) and the *Euchaetes* group (DaCosta *et al.* 2006). The *Halysidota* group is not segregated here, since the constituent genera were not defined by Jacobson and Weller (2006). The *Euchaetes* group genera are herein placed together at the end of the subtribe. The sequential order of the remaining phaegopterines follows that of Franclemont (1983), with newly included, but unplaced genera appended.

2. The correct date of publication is 1875, not 1874 as given in Franclemont (1983).

- flavescens* (Rothschild, 1909)
187. **maculata** Harris, 1841
fulvoflava (Walker, 1855)
guttifera (Herrich-Schäffer, 1855)
a. **agassizii** (Packard, 1864)
californica (Walker, 1864)
angulifera (Walker, 1866)
salicis (Boisduval, 1869)
alni (Hy. Edwards, 1877) ¹
eureka (Dyar, 1904)
b. **texana** (Rothschild, 1909)
188. **indistincta** (Barnes & McDunnough, 1910)
189. **annulosa** (Walker, 1855)

LEUCANOPSIS Rego-Barros, 1956

190. **longa** (Grote, 1880)
191. **perdentata** (Schaus, 1901)
192. **lurida** (Henry Edwards, 1887)
otho (Barnes, 1901)

AEMILIA Kirby, 1892

- AEMELES* Walker, 1855 [homonym]
193. **ambigua** (Strecker, 1880)
bolteri (Henry Edwards, 1884)
bolterii of authors, misspelling
syracosia (Druce, 1889)

APOCRISIAS Franclemont, 1966

194. **thaumasta** Franclemont, 1966

PSEUDOHEMIHYALEA Rego-Barros, 1956 ²

195. **edwardsii** (Packard, 1864)
translucida (Walker, 1865)
quercus (Boisduval, 1869)
argillacea Rothschild, 1909
ochreous [sic] Meadows, 1939
edwardsi of authors, misspelling
196. **splendens** Barnes & McDunnough, 1910
197. **labecula** (Grote, 1881)
a. **griseiventris** (Rothschild, 1935)

CALIDOTA Dyar, 1901

198. **laqueata** (Henry Edwards, 1887)

OPHARUS Walker, 1855

199. **muricolor** (Dyar, 1898)

CARALEs Walker, 1855

- SENIA* Möschler, 1878
200. **arizonensis** (Rothschild, 1909)
fumata (Barnes & McDunnough, 1910)

PAREUCHAETES Grote, 1865

201. **insulata** (Walker, 1855)

-
1. The correct date of publication is 1877, not 1876 as given in Franclemont (1983).
 2. Taxonomic treatment follow Toulgoet (1994).

LERINA Walker, 1854

202. *incarnata* Walker, 1854
robinsonii (Boisduval, 1869)
cadaverosa Grote, 1865
affinis Grote, 1865

EUPSEUDOSOMA Grote, 1865

203. *involuta* (Sepp, 1849) [extralimital]
nivea (Herrich-Schäffer, 1855)
niveum Grote, 1866 [unnecessary replacement name]
bicolor (Rothschild, 1909), in part
flavida Dognin, 1911
a. *floridum* Grote, 1882
immaculata (Graef, 1887)

BERTHOLDIA Grote, 1896

204. *trigona* (Grote, 1879)
205. *albipuncta* Schaus, 1896

NERITOS Walker, 1855

- ANTILOBA* Weymer, 1895
206. *prophaea* (Schaus, 1905)

AGARAEA Herrich-Schäffer, [1855]

- AGORAEA* Herrich-Schäffer, [1855] [misspelling]
AGAREA Schauss 1892 [misspelling]

207. *semivitrea* Rothschild, 1909¹

PURIUS Walker, 1855

- SPODARCTIA* Dyar, 1925
208. *superpulverea* Dyar, 1925

BITURIX Walker, 1855

209. *venosata* Walker, 1865

PAGARA Walker, 1856

- COMACLA* Walker, [1865]
VANESSODES Grote & Robinson, 1870
210. *simplex* Walker, 1856
murina (Walker, [1865])
clarus (Grote & Robinson, 1870)
texana (French, 1889)

TROCODIMA Watson, 1980

- MICRODOTA* Dognin, 1906 [homonym]
211. *fuscipes* (Grote, 1883)
hemiceras (Forbes), 1931

EUERYTHRA Harvey, 1876

212. *phasma* Harvey, 1876
213. *trimaculata* Smith, 1887

NEOPLYNES Hampson, 1900

214. *eudora* (Dyar, 1894)²

1. Reported from Texas by C. Bordelon.

Euchaetes clade

CYCNIA Hübner, 1818

TANADA Walker, 1856

215. *inopinatus* (Henry Edwards, 1882)

nivalis (Stretch, 1906)

216. *collaris* (Fitch, 1857)

pudens (Henry Edwards, 1882)

217. *tenerosa* (Dyar, 1913)

218. *tenera* Hübner, 1818

antica (Walker, 1856)

sciurus (Boisduval, 1869)

yosemite (Henry Edwards, 1884)

219. *oregonensis* (Stretch, [1874])

EUCHAETES Harris, 1841

STENOPHAEA Hampson, 1901

EUCHAETIAS Lyman, 1902

PROTAMOLIS Hampson, 1901

220. *zella* (Dyar, 1902)

221. *perlevis* Grote, 1882

222. *fusca* (Rothschild, 1910)

223. *helena* (Cassino, 1928)

224. *castalla* (Barnes & McDunnough, 1910)

griseopunctata (Barnes & McDunnough, 1910)

225. *elegans* (Stretch, [1874])

226. *egle* (Drury, 1773)

cyclica Henry Edwards, 1884

227. *gigantea* (Barnes & McDunnough, 1910)

228. *polingi* (Cassino, 1928)

229. *bolteri* Stretch, 1885

scepsiformis Graef, 1887

230. *antica* (Walker, 1856)

salatis (Boisduval, 1870)

pollinia (Boisduval, 1870)

zonalis Grote, 1882

parazona Dyar, 1912

sinaloensis Dyar, 1921

231. *albicosta* (Walker, 1855)

fumidus Henry Edwards, 1884

PYGOCTENUCHA Grote, 1883

PROTOSIA Hampson, 1900

232. *terminalis* (Walker, 1854)¹

harrisii (Boisduval, 1869)

votiva (Henry Edwards, 1884)

233. *pyrrhoura* (Hulst, 1881)

ECTYPIA Clemens, 1861

EUVERNA Neumögen & Dyar, 1893

234. *bivittata* Clemens, 1861

nigroflava (Graef, 1887)

2. Previously placed in the Lithosiini (Franclemont 1983), as suggested by Forbes (1960). DaCosta *et al.* (2006) state that *N. eudora* did not share characters with the *Euchaetes* group of genera included in their study, and concurred that it was a lithosiine. However, the male genitalia show clear affinities to the Phaegopterina (setal tuft at base of uncus, dorsal processes of uncus, tripartite valve), and we therefore retain this taxon in the Phaegopterina.

1. *P. terminalis* is likely congeneric with *Euchaetes* (DaCosta *et al.* 2006). Both genera are in need of revision.

235. *mexicana* (Dognin, 1911)

236. *clio* (Packard, 1864)

thona (Strecker, 1899)

a. *jessica* (Barnes, 1900)

PYGARCTIA Grote, 1871

237. *murina* (Stretch, 1885)

oslari Rothschild, 1910

poliochroa Hampson, 1910

238. *pterygostigma* Dyar, 1909

albistrigata Barnes & McDunnough, 1913

albostrigata Ferguson & Opler 2006, misspelling

239. *neomexicana* Barnes, 1904

240. *lorula* Dyar, 1914

241. *roseicapitis* (Neumögen & Dyar, 1893)

242. *flavidorsalis* Barnes & McDunnough, 1913

243. *spraguei* (Grote, 1875)

conspicua (Neumögen, 1890)

244. *abdominalis* Grote, 1871

grossbecki Davis, 1913

245. *eglenensis* (Clemens, 1861)

vivida (Grote, 1882)

KODIOSOMA Stretch, 1872

246. *fulva* Stretch, 1872

nigrum Stretch, 1872

eavesii Stretch, 1872

tricolor Stretch, 1872

otero Barnes, 1907

CTENUCHINA

CTENUCHA W. Kirby, 1837

EUCTENUCHA Grote, 1873

247. *venosa* Walker, 1854

tigrina Strecker, 1899

248. *cressonana* Grote, 1863

sanguinaria Strecker, 1878

lutea Grote, 1902

249. *virginica* (Esper, 1794)

latreillana W. Kirby, 1837

250. *multifaria* (Walker, 1854)

luteoscapus (Neumögen & Dyar, 1893)

251. *rubroscapus* (Ménétriés, 1857)

walsinghamii Henry Edwards, 1873

ochroscapus Grote & Robinson, 1868)

corvina (Boisduval, 1869)

252. *brunnea* Stretch, 1872

DAHANA Grote, 1875

253. *atripennis* Grote, 1875

CISSEPS Franclemont, 1936

SCEPSIS Walker, 1854 [homonym]

254. *fulvicollis* (Hübner, [1818])

semidiaphana (Harris, 1839)

a. *pallens* (Henry Edwards, 1886)

255. *packardii* (Grote, 1865)
 mathewi (Henry Edwards, 1874)
 a. *cocklei* (Dyar, 1904)
256. *wrightii* (Stretch, 1885)
 a. *gravis* (Henry Edwards, 1886)

LYMIRE Walker, 1854
257. *edwardsii* (Grote, 1881)

Euchromiina

- EUCEREON** Hübner, [1819]
 ERITHALES Poey, 1832
 ILIPA Walker, 1854
 ACRIDOPSIS Butler, 1876
258. *myrina* Druce, 1884
259. *erythrolepis* Dyar, 1910

- NELPHE** Herrich-Schäffer, [1858]
260. *carolina* (Henry Edwards, 1887)
 cubensis Schaus, 1904
 ?*confusum* Rothschild, 1912
261. *relegatum* (Schaus, 1911)

- EMPYREUMA** Hübner, 1818
262. *pugione* (Linnaeus, 1767)
 affinis Rothschild, 1912

- MACROCNEME** Hübner, 1818
263. *chrysitis* (Guérin-Méneville, 1844)
 iola Druce, 1884

- APEPLOPODA** Watson, 1980
 GYMNOPODA Felder, 1874 [homonym]
264. *mecrida* (Druce, 1889)
 dulcicordis (Dyar, 1907)

- EPISCEPSIS** Butler, 1877
265. *inornata* (Walker, 1856)

- PSILOPLEURA** Druce, 1898¹
266. *vittata* (Walker, [1865])

- PSEUDOSPHEX** Hübner, 1818
 ABROCHIA Herrich-Schäffer, 1855
 CHRYSOSTOLA Herrich-Schäffer, 1850-1858 [1855]
 SPHECOPSYCHE Dognin, 1898
 PSEUDARGYROEIDES Klages, 1906
267. *leovasquezae* (Perez & Sánchez, 1986)

- MYRMECOPSIS** Newman, 1850
 SPHECOPSIS Felder, 1874
268. *strigosa* (Druce, 1884)

COSMOSOMA Hübner, [1823]

1. The correct authorship is Druce, not Hampson (Franclemont 1983), as noted by Watson *et al.* (1980).

- LAGARIA* Walker, 1854
ERRUCA Walker, 1854
ILIPA Walker, 1854
ARISTODAEMA Wallengren, 1858
REZIA Kirby, 1892
BOMBOPSYCHE Hampson 1898
SPHECOMIMAX Bryk, 1953
 269. *festivum* Walker, 1854
 aleus Schaus, 1889
 270. *teuthras* (Walker, 1854) [extralimital]
 a. *cingulatum* Butler, 1876
 rubrigutta Skinner, 1906
 271. *myrodora* Dyar, 1907

DIDASYS Grote, 1875
 272. *belae* Grote, 1875

SYNTOMEIDA Harris, 1839
 HIPPOLA Walker, 1854
 273. *ipomoeae* (Harris, 1839)
 ferox (Walker, 1854)
 euterpe (Herrich-Schäffer, 1856)
 274. *melanthus* (Cramer, [1779]) [extralimital]
 nycteus (Cramer, 1780)
 apricans (Walker, 1854)
 a. *albifasciata* Butler, 1876
 275. *epilais* (Walker, 1854) [extralimital]
 a. *jucundissima* Dyar, 1907
 276. *hampsonii* Barnes, 1904
 befana Skinner, 1906

PSEUDOCHARIS Druce, 1884
 277. *minima* (Grote, 1867)

POLIOPASTEIA Hampson, 1898
 278. *clavipes* (Boisduval, 1870)

HORAMA Hübner, [1819]
 MASTIGOCERA Harris, 1839
 PHYLLOECIA Guérin-Méneville, 1843
 CALLICARUS Grote, 1866
 DRUCEA Kirby, 1892
 279. *panthelon* (Fabricius, 1793) [extralimital]
 tibialis (Butler, 1876)
 serena Schaus, 1924
 stoneri Lindsey, 1926
 panthelon Ferguson & Opler, 2006, misspelling
 a. *texanus* (Grote, 1867)
 280. *plumipes* (Drury, 1773)
 punctata (Guérin-Méneville, 1844)
 jalapensis Neumögen, 1890

Genus and tribal placement undetermined

281. "*Afrida*" *exegens* Dyar, 1922

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