



Twelve new species-group replacement names and further nomenclatural notes on Lycaenidae (Lepidoptera)

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Abstract

Twelve new species-group names in Lycaenidae are proposed to replace invalid ones due to primary or secondary homonymy: *Arhopala ariana wanggu* (for *Arhopala ariana hainana* Wang & Gu, 1997), *Arhopala paraganesa felipa* (for *Arhopala paraganesa hayashii* Schröder & Treadaway, 2002), *Arhopala paraganesa insula* (for *Panchala paraganesa hainana* Wang & Gu, 1997), *Favonius leechina* (for *Thecla orientalis leechi* Riley, 1939), *Jamides cleodus sunadyl* (for *Lampides cleodus lydanus* Fruhstorfer, 1916), *Lycaena aditya charmesse* (for *Lycaena aditya churkini* Charmeux & Desse, 2006), *Lycaena alpherakii sergeii* (for *Thersamonia alpherakii zhdankoi* Churkin, 2002), *Megisba strongyle miskinigra* (for *Lycaena nigra* Miskin, 1890), *Plebejus (Agriades) glandon manitoba* (for *Plebeius aquilo* var. *lacustris* Freeman, 1939), *Plebejus (Albulina) orbitulus chaos* (for *Albulina tibetana* D'Abbrera, 1993), *Plebejus (Vacciniina) fergana nikolaii* (for *Vacciniina fergana rubini* Churkin, 2006), and *Plebejus (Plebejides) pylaon tumultus* (for *Plebejus (Plebejides) pylaon forsteri* Bálint, 1990). Nine other junior secondary homonyms are discussed, but no new replacement names are proposed for them because they are no longer considered congeneric with their senior homonyms. Attention is called to three further junior primary homonyms in use which need to be referred to the International Commission on Zoological Nomenclature for a ruling under its plenary power.

Key words: Homonyms, Lycaenidae, nomenclature, replacement names

Introduction

During preparation of a comprehensive synonymical list of the Lycaenidae (Lepidoptera: Papilionoidea) of the world, for the "Global Butterfly Names" project (www.ucl.ac.uk/taxome/gbn/) numerous nomenclatural problems were encountered. Among them, 358 available species-group names were found to be junior – primary or secondary – homonyms. Such junior homonyms are invalid for nomenclatural purposes (ICZN, 1999: Art. 57) and need to be replaced either by an available and potentially valid synonym or, for lack of such a name, by a new substitute name (ICZN, 1999: Art. 60). The vast majority of junior homonyms recorded have already been substituted by previous authors, or are regarded as junior objective or subjective synonyms, and thus in no need to be replaced under present taxonomic hypotheses. For instance, four homonymous names of Afrotropical Lycaenidae were replaced recently by the author (Lamas, 2007). However, there remains a set of 24 homonyms in use which have not been substituted yet, have no available and potentially valid synonyms, and which form the subject of the present paper.

For the first group of 12 homonyms, new replacement names (*nomina nova*) are presented below, in a list arranged alphabetically by current genus.

New replacement names

1. *Arhopala ariana wanggu* Lamas, *nom. nov.*

= *Arhopala ariana hainana* Wang & Gu, 1997: 253, fig. 307. Primary homonym (by present selection) of *Arhopala horsfieldi hainanus* Gu & Wang, 1997: 253, fig. 305.

Arhopala ariana hainana and *A. horsfieldi hainanus* were published simultaneously (Gu & Chen, 1997); I hereby give precedence to *Arhopala horsfieldi hainanus* over *Arhopala ariana hainana*.

Etymology: The name *wanggu* is an arbitrary combination of letters, derived from the names of the authors, Wang and Gu. A noun in apposition.

2. *Arhopala paraganesa felipa* Lamas, *nom. nov.*

= *Arhopala paraganesa hayashii* Schröder & Treadaway, 2002: 240, figs. 7–8, 14. Junior secondary homonym of *Narathura anarte hayashii* Detani, 1983: 25, 55, pl. 9, figs. 8–11.

Narathura Moore, 1879 is currently regarded as a junior subjective synonym of *Arhopala* Boisduval, 1832 (Vane-Wright & Gaonkar, 2006). *Narathura anarte hayashii* is currently regarded as a junior subjective synonym of *Arhopala eridanus lewara* Ribbe, 1926 (Hayashi, 1984).

Etymology: Derived from the type country of *A. p. hayashii*, the Philippines. A noun in apposition.

3. *Arhopala paraganesa insula* Lamas, *nom. nov.*

= *Panchala paraganesa hainana* Wang & Gu, 1997: 254, fig. 310. Secondary homonym (by present selection) of *Arhopala horsfieldi hainanus* Gu & Wang, 1997: 253, fig. 305.

Panchala Moore, 1882 is currently regarded as a junior subjective synonym of *Arhopala* Boisduval, 1832 (Vane-Wright & Gaonkar, 2006). *Panchala paraganesa hainana* and *Arhopala horsfieldi hainanus* were published simultaneously (Gu & Chen, 1997); I hereby give precedence to *Arhopala horsfieldi hainanus* over *Panchala paraganesa hainana*.

Etymology: From the Latin *insula*, meaning "island". A noun in apposition.

4. *Favonius leechina* Lamas, *nom. nov.*

= *Thecla orientalis leechi* Riley, 1939: 355. Junior primary homonym of *Thecla leechii* Nicéville, 1893: 335.

Thecla leechii was first transferred to *Satsuma* Murray, 1874 by Evans (1912: 989), but *Satsuma* is a junior homonym, replaced by *Ahlbergia* Bryk, 1946. Johnson (1992) placed *leechii* in *Ahlbergia*, but the latter is considered a junior subjective synonym of *Callophrys* Billberg 1820 (Gorbunov, 2001; Robbins, 2004). *Thecla orientalis leechi* was regarded by Fujioka (1994) and Koiwaya (2007) as a valid species in *Favonius* Sibata & Ito, 1942. Since both *leechii* Nicéville and *leechi* Riley were considered congeneric after 1899, Article 23.9.5 of the International Code of Zoological Nomenclature (ICZN, 1999) does not apply.

Etymology: An arbitrary combination of letters, resulting from uniting the surname of John Henry Leech (1862–1900), and the type country, China, of *leechi* Riley. A noun in apposition.

5. *Jamides cleodus sunadyi* Lamas, *nom. nov.*

= *Lampides cleodus lydanus* Fruhstorfer, 1916: 7. Junior primary homonym of *Lampides celeno lydanus* Fruhstorfer, 1910: 219.

Lampides celeno lydanus is currently regarded as a junior subjective synonym of *Jamides celenus* (Cramer, 1775) (Shirôzu & Ueda, 1992). This homonymy was already recognized by Vane-Wright & Jong (2003: 150), but no replacement name was proposed.

Etymology: An anagram of *lydanus*. A noun in apposition.

6. *Lycaena aditya charmesse* Lamas, *nom. nov.*

= *Lycaena aditya churkini* Charmeux & Desse, 2006: 85, 89, pl. 3, figs. 1–3, 7–9. Junior secondary homonym of *Athamanthia churkini* Zhdanko, 2000: 233, figs. 1–2.

Athamanthia Zhdanko, 1983 is regarded as a junior subjective synonym of *Lycaena* Fabricius, 1807 (Hesselbarth *et al.*, 1995: 458). *Athamanthia churkini* is currently regarded as a valid species (Bozano & Weidenhoffer, 2001).

Etymology: An arbitrary combination of letters, uniting parts of the names of the authors, Charmeux and Desse. A noun in apposition.

7. *Lycaena alpherakii sergeii* Lamas, *nom. nov.*

= *Thersamonia alpherakii zhdankoi* Churkin, 2002: 183, pl. 15, figs. 16–20. Junior secondary homonym of *Athamanthia zhdankoi* Lukhtanov, 2000: 187, pl. 14a, figs. 2a–b.

Both *Thersamonia* Verity, 1919, and *Athamanthia* Zhdanko, 1983 are regarded as junior subjective synonyms of *Lycaena* Fabricius, 1807 (Hesselbarth *et al.*, 1995: 458). *Athamanthia zhdankoi* is currently regarded as a junior subjective synonym of *Lycaena churkini* (Zhdanko, 2000) (Bozano & Weidenhoffer, 2001).

Etymology: Named after Sergei Churkin. A noun in the genitive case.

8. *Megisba strongyle miskinigra* Lamas, *nom. nov.*

= *Lycaena nigra* Miskin, 1890: 36. Junior primary homonym of *Lycaena orion* var. *nigra* Gerhard, 1882: 126.

Lycaena nigra Miskin is currently regarded as a valid subspecies of *Megisba strongyle* (Felder, 1860) (Edwards *et al.*, 2001). *Lycaena orion* var. *nigra* Gerhard (unambiguously proposed for a subspecific entity) is currently regarded as a junior subjective synonym of *Scolitantides orion* (Pallas, 1771) (e.g. Gómez & Arroyo, 1981). However, *Lycaena nigra* Miskin was only transferred to *Megisba* Moore, 1881 after 1899, by Waterhouse (1902), whereas *Lycaena orion* var. *nigra* Gerhard was still included in *Lycaena* after 1899 (Courvoisier, 1914).

Etymology: Derived from the surname of William Henry Miskin (1842–1913). A noun in apposition.

9. *Plebejus (Agriades) glandon manitoba* Lamas, *nom. nov.*

= *Plebeius* [sic] *aquilo* var. *lacustris* Freeman, 1939: 180. Junior secondary homonym of *Lycaeides idas lacustris* Beuret, 1938: 683.

Plebeius [sic] *aquilo* var. *lacustris* (unambiguously proposed for a subspecific entity) is currently regarded as a valid subspecies of *Plebejus (Agriades) glandon* (Prunner, 1798) (Shepard, 2000), although Layberry *et al.* (1998) treat it as a junior subjective synonym of *Agriades glandon megallo* (McDunnough, 1927). *Lycaeides idas lacustris* is regarded by Bridges (1988) as a valid subspecies of *Lycaeides idas* (Linnaeus, 1760), but Bálint & Johnson (1997) consider *Lycaeides* Hübner as at most a subgenus of *Plebejus* Kluk, 1780.

Etymology: From the type locality of *lacustris* Freeman (Canada, Manitoba, Norway House). A noun in apposition.

10. *Plebejus (Albulina) orbitulus chaos* Lamas, *nom. nov.*

= *Albulina tibetana* D'Abrera, 1993: 497, fig. Junior secondary homonym of *Polyommatus (Lycaeides) tibetanus* Forster, 1940: 879, pls. 22–23, fig. 12.

Albulina tibetana is currently regarded as a subspecies of *Albulina orbitulus* (Prunner, 1798) (Huang, 2001: 73), but generally *Albulina* Tutt, 1909 is treated as a subgenus of *Plebejus* Kluk, 1780 (Gorbunov, 2001). *Polyommatus (Lycaeides) tibetanus* is currently regarded as a junior subjective synonym of *Plebejus (Aricia) annulata* (Elwes, 1906) (Bálint & Johnson, 1997).

Etymology: From the Greek *chaos*, meaning "opening, gap, void, abyss, disorder, confusion".

11. *Plebejus (Vacciniina) fergana nikolaii* Lamas, *nom. nov.*

= *Vacciniina fergana rubini* Churkin, 2006: 10, pls. 7–8, figs. 21–23. Junior secondary homonym of *Agriades glandon rubini* Churkin, 2005: 20, pls. 3–4, figs. 25–28.

Both *Agriades* Hübner, 1819 and *Vacciniina* Tutt, 1909 are often regarded as junior subjective synonyms or subgenera of *Plebejus* Kluk, 1780 (e.g. Hesselbarth *et al.*, 1995; Gorbunov, 2001), although Koçak & Seven (1998) consider them instead subgenera of *Polyommatus* Latreille, 1804 (Gorbunov [loc. cit.] treats *Polyommatus* as subgenus of *Plebejus*). On the other hand, phylogenetic resolution at the generic level for Eliot's (1973) '*Polyommatus* section', comprising some 33 "valid genera" (reduced to nine by Bálint & Johnson, 1997), has not been achieved yet. Given this state of affairs, it is probably best for the present to consider *Agriades* and *Vacciniina* as nothing more than subgenera of *Plebejus*.

Etymology: Named after Nikolai Rubin, collector of the original type series of *Vacciniina fergana rubini*. A noun in the genitive case.

12. *Plebejus (Plebejides) pylaon tumultus* Lamas, *nom. nov.*

= *Plebejus (Plebejides) pylaon forsteri* Bálint, 1990: 279. Junior primary homonym of *Plebejus (Lycaeides) idas forsteri* Agenjo, 1966: 526.

Etymology: From the Latin *tumultus*, meaning "confusion". A noun in apposition.

The following 12 names in use are junior homonyms, but no new replacement names are proposed for them, either because they are junior primary homonyms which apply to taxa that have not been considered congeneric with their senior homonyms also in use after 1899 (ICZN, 1999: Art. 23.9.5), or because they are secondary junior homonyms that have not been replaced previously, and belong to taxa no longer considered congeneric with their senior homonyms (ICZN, 1999: Art. 59.2). The three cases listed herein, involving junior primary homonyms, need to be referred to the International Commission on Zoological Nomenclature for a ruling under the plenary power, and meanwhile prevailing use of those names should be maintained. The names are listed alphabetically by original genus:

Other junior homonyms

13. *Chrysophanus boldenarum caerulea* Salmon, 1946: 10, pl. 1, figs. 12–13. Junior secondary homonym of *Lycaena damon* var. *caerulea* Staudinger, 1871: 13.

Chrysophanus boldenarum caerulea is currently regarded as a valid subspecies of *Lycaena boldenarum* White, 1862 (Dugdale, 1988). *Lycaena damon* var. *caerulea* was transferred to *Plebejus* Kluk, 1780 by Kirby (1877) and is currently regarded as a valid species of *Polyommatus* Latreille, 1804 (Hesselbarth *et al.*, 1995).

14. *Lycaena argus bellieri* Oberthür, 1910: 191, pl. 40, figs. 280–281. Junior secondary homonym (by present selection) of *Polyommatus gordius bellieri* Oberthür, 1910: 114, pl. 38, figs. 249–250.

Lycaena argus bellieri is currently regarded as a valid species of *Lycaeides* Hübner, 1819 (Jutzeler *et al.*, 2003), though Bálint & Johnson (1997) consider *Lycaeides* Hübner as at most a subgenus of *Plebejus* Kluk, 1780. *Polyommatus gordius bellieri* is currently regarded as a junior subjective synonym of *Lycaena alciphron gordius* (Sulzer, 1776).

15. *Lycaena euphemus burdigalensis* Stempffer, 1932: 108. Junior secondary homonym of *Chrysophanus dispar* var. *burdigalensis* Lucas, 1913: 282.

Lycaena euphemus burdigalensis Stempffer is currently regarded as a valid (though endangered, or possibly extinct) subspecies of *Maculinea teleius* (Bergsträsser, 1779) (Wynhoff, 1998). *Chrysophanus dispar* var. *burdigalensis* (unambiguously proposed for a subspecific entity) is currently regarded as a junior subjective synonym of *Lycaena dispar rutilus* (Werneburg, 1864) (Bozano & Weidenhoffer, 2001).

16. *Lycaena tengstroemi* var. *iliensis* Grun-Grshimailo, 1891: 452. Junior secondary homonym of *Polyommatus phoenicurus* var. *iliensis* Staudinger, 1886: 203.

Lycaena tengstroemi var. *iliensis* (unambiguously proposed for a subspecific entity) is currently regarded as a valid species of *Neolycaena* Nicéville, 1890 (Weidenhoffer *et al.*, 2004), though Robbins (2004) regards *Neolycaena* as a junior subjective synonym of *Satyrium* Scudder, 1876. *Polyommatus phoenicurus* var. *iliensis* (unambiguously proposed for a subspecific entity) is currently regarded as a junior subjective synonym of *Athamanthia athamantis* (Eversmann, 1854) (Bozano & Weidenhoffer, 2001), though *Athamanthia* Zhdanko, 1983 is considered by Hesselbarth *et al.* (1995) as a junior subjective synonym of *Lycaena* Fabricius, 1807.

17. *Lycaena escheri* var. *splendens* Stefanelli, 1904: 11. Junior secondary homonym of *Polyommatus splendens* Staudinger, 1881: 280.

Lycaena escheri var. *splendens* (unambiguously proposed for a subspecific entity) is currently regarded as a valid subspecies of *Polyommatus escheri* (Hübner, 1823) (Higgins & Riley, 1970). *Polyommatus splendens* Staudinger is currently regarded as a valid species of *Lycaena* Fabricius, 1807 (Bozano & Weidenhoffer, 2001) [see also name number 22 below].

18. *Lycaena* [sic] *davidi* Poujade, 1884: 203. Junior primary homonym of *Lycaena tengstroemi* var. *davidi* Oberthür, 1881: 13, pl. 8, fig. 1.

Lycaena [sic] *davidi* Poujade is currently regarded as a valid species of *Tongeia* Tutt, 1908 (Huang, 2001: 70). *Lycaena tengstroemi* var. *davidi* Oberthür (unambiguously proposed for a subspecific entity) is currently

regarded as a valid species of *Neolycaena* Nicéville, 1890 (Weidenhoffer *et al.*, 2004), though Robbins (2004) regards *Neolycaena* as a junior subjective synonym of *Satyrium* Scudder, 1876. *Lycoena* [sic] *davidi* was first transferred to *Everes* Hübner, 1819 by Leech (1893). These names have not been considered congeneric after 1899.

19. ***Lysandra pulchella* Bernardi**, 1951: 30. Junior secondary homonym of *Polyommatus (Erina) pulchella* Swainson, 1833: pl. 134.

Lysandra pulchella was introduced by Bernardi (1951) as a replacement name for *Lycaena pulchra* Sheljuzhko, 1928, a junior primary homonym of *Lycaena pulchra* Murray, 1874 (currently *Leptotes pulchra* – Ackery *et al.*, 1995). Eckweiler & Häuser (1997) ignored Bernardi's name and mistakenly accepted *pulchra* Sheljuzhko (emended to *pulcher*) as a valid species of *Polyommatus* Latreille, 1804. *Polyommatus (Erina) pulchella* is currently regarded as a junior subjective synonym of *Candalides xanthospilos* (Hübner, 1817) (Edwards *et al.*, 2001).

20. ***Phoenicurusia margelanica nigra* Zhdanko**, 1999: 214. Junior secondary homonym of *Lycaena orion* var. *nigra* Gerhard, 1882: 126.

Phoenicurusia margelanica nigra is currently regarded as a valid subspecies of *Phoenicurusia margelanica* (Staudinger, 1881) (Bozano & Weidenhoffer, 2001), but *Phoenicurusia* Verity, 1943 is regarded as a junior subjective synonym of *Lycaena* Fabricius, 1807 (Eckweiler, 2004). *Lycaena orion* var. *nigra* Gerhard (unambiguously proposed for a subspecific entity) is currently regarded as a junior subjective synonym of *Scolitantides orion* (Pallas, 1771) (e.g. Gómez & Arroyo, 1981).

21. ***Polyommatus amphidamas* var. *lapponica* Backhaus**, 1876: 40. Junior secondary homonym of *Lycaena jolas* [sic] var. *lapponica* Gerhard, 1852: 19, pl. 34, figs. 3a–c.

Polyommatus amphidamas var. *lapponica* (unambiguously proposed for a subspecific entity) is currently regarded as a valid subspecies of *Lycaena helle* (Schiffermüller, 1775) (Bozano & Weidenhoffer, 2001). *Lycaena jolas* [sic] var. *lapponica* (unambiguously proposed for a subspecific entity) is currently regarded as a junior subjective synonym of *Lycaeides idas* (Linnaeus, 1760) (Bridges, 1988), but Bálint & Johnson (1997) consider *Lycaeides* Hübner as at most a subgenus of *Plebejus* Kluk, 1780.

22. ***Polyommatus splendens* Staudinger**, 1881: 280. Junior primary homonym of *Polyommatus (Nais) splendens* Swainson, 1833: pl. 136.

Polyommatus (Nais) splendens Swainson is currently regarded as a junior subjective synonym of *Chrysoritis thysbe* (Linnaeus, 1764) (Ackery *et al.*, 1995; Heath, 1997), whereas *Polyommatus splendens* Staudinger is regarded as a valid species of *Lycaena* Fabricius, 1807 (Bozano & Weidenhoffer, 2001). *Polyommatus splendens* Swainson was removed from *Polyommatus* Latreille, 1804 and placed in *Axiocerses* Hübner, 1819 by Kirby (1871). These names have not been considered congeneric after 1899.

23. ***Thecla alcestis* Grose-Smith**, 1889: 300. Junior primary homonym of *Thecla alcestis* W.H. Edwards, 1871: 271.

Thecla alcestis Grose-Smith was transferred to *Hypolycaena* Felder & Felder, 1862 by Grose-Smith (1900), where it is currently regarded as a valid species (Tennent, 2006). *Thecla alcestis* Edwards is currently

regarded as a valid species in *Phaeostrymon* Clench, 1961 (Robbins, 2004). These names have not been considered congeneric after 1899.

24. *Virochala* [sic] *affinis* Rothschild, 1915: 395. Junior secondary homonym of *Deudorix affinis* Röber, 1886: 69, pl. 5, figs. 8, 13.

Virochala [sic] *affinis* is currently regarded as a valid species of *Deudorix* Hewitson, 1863 (Tennent, 2006). *Deudorix affinis* Röber is currently regarded as a junior subjective synonym of *Rapala dioetas* (Hewitson, 1863) (Takanami, 1989: 54).

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