



On the synonymy of certain taxonomic names within the subgenus *Mellicta* of the genus *Melitaea* (Lepidoptera: Nymphalidae)

О синонимии ряда названий в подроде *Mellicta* рода *Melitaea* (Lepidoptera: Nymphalidae)

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Abstract. The taxonomic history of the subgenus *Mellicta* Billberg, 1820 of the genus *Melitaea* Fabricius, 1807 is reviewed. The names *Mediomellicta* Lastukhin, 2003, **syn. nov.**, *Monomellicta* Lastukhin, 2003, **syn. nov.**, *Neomellicta* Lastukhin, 2003, **syn. nov.**, *Oreomellicta* Lastukhin, 2003, **syn. nov.**, *Paramellicta* Lastukhin, 2003, **syn. nov.**, *Polymellicta* Lastukhin, 2003, **syn. nov.**, and *Promellicta* Lastukhin, 2003, **syn. nov.**, are synonymised with *Mellicta*.

Резюме. В статье рассматривается таксономическая история подрода *Mellicta* Billberg, 1820 рода *Melitaea* Fabricius, 1807. Названия *Mediomellicta* Lastukhin, 2003, **syn. nov.**, *Monomellicta* Lastukhin, 2003, **syn. nov.**, *Neomellicta* Lastukhin, 2003, **syn. nov.**, *Oreomellicta* Lastukhin, 2003, **syn. nov.**, *Paramellicta* Lastukhin, 2003, **syn. nov.**, *Polymellicta* Lastukhin, 2003, **syn. nov.**, *Promellicta* Lastukhin, 2003, **syn. nov.** синонимизированы с *Mellicta*.

Key words: taxonomy, nomenclature, synonymy, Lepidoptera, Nymphalidae, *Melitaea*, *Mellicta*

Ключевые слова: таксономия, номенклатура, синонимия, Lepidoptera, Nymphalidae, *Melitaea*, *Mellicta*

ZooBank Article LSID: 7A0321D9-6615-421D-BDB8-8F27F908BD45

Fabricius (1807) established the genus *Melitaea* for the previously described *Papilio cinxia* Linnaeus, 1758. Billberg (1820) introduced the genus *Mellicta* without designating a type species. He included *Papilio athalia* Rottemburg, 1775, along with several species from the family Nymphalidae, which are currently classified under other systematic groups, in this genus. Moore (1901) designated *P. athalia* as the type species

of the genus *Mellicta*; however, this nomenclatural act was largely overlooked by subsequent researchers. Barnes & McDunnough (1916) synonymised *Mellicta* with *Melitaea*, intentionally selecting *P. cinxia* as the type species of the genus *Mellicta* while disregarding Moore's earlier designation of the type species. Consequently, *Mellicta* was considered a junior synonym of *Melitaea* until the mid-20th century.

Referring to Moore's publication, Higgins (1955) reinstated the name *Mellicta* and characterised the genus, which included twelve species, according to the author. Higgins argued that based on morphological and zoogeographical characteristics, *Mellicta* and *Melitaea* should be considered as distinct genera. Subsequently, many authors, adhering to Higgins' concept, recognised *Mellicta* as a separate genus (Varga, 1969; Lukhtanov & Lukhtanov, 1994; Tolman, 1997; Devyatkin, 2000; Igarashi et al., 2001; Korshunov, 2002; Dubatolov et al., 2005; Bush, 2011; Lang, 2012; Bush & Kolesnichenko, 2016a, 2016b). A.A. Lastukhin (2003) published a paper devoted to the systematics of the genus *Mellicta*, in which he described two new subgenera and six new sections.

Other authors classified *Mellicta* as a subgenus or a group of species within the genus *Melitaea* (Kurentsov, 1970; Nekrutenko, 1985; Hesselbarth et al., 1995; Gorbunov & Kosterin, 2007; Yakovlev, 2007; Oorschot & Coutsis, 2014).

Order Lepidoptera

Family Nymphalidae

Subfamily Nymphalinae

Tribe Melitaeini

Genus *Melitaea* Fabricius, 1807

Subgenus *Mellicta* Billberg, 1820

Mellicta Billberg, 1820: 77. Type species by subsequent designation (Moore, 1901: 2): *Papilio athalia* Rottentburg, 1775.

Athaliaeformia Verity, 1950: 89, 90, 157 (as a distinct genus). Type species by subsequent designation (Higgins, 1955: 4): *Papilio athalia* Rottentburg, 1775. Unavailable name according to Article 13.3 of the International Code of Zoological Nomenclature (ICZN, 1999).

Mediomellicta Lastukhin, 2003: 101, 104 (as a section of the subgenus *Polymellicta* Lastukhin, 2003), **syn. nov.** Type species by original designation: *Melitaea britomartis* Assmann, 1847.

Monomellicta Lastukhin, 2003: 101, 105 (as a section of the subgenus *Polymellicta* Lastukhin, 2003), **syn. nov.** Type species by original designation: *Melitaea varia* Meyer-Dür, 1851.

Neomellicta Lastukhin, 2003: 103 (as a section of the subgenus *Mellicta* Billberg, 1820), **syn. nov.** Type

species by original designation: *Papilio deione* Geyer, 1832.

Oreomellicta Lastukhin, 2003: 101, 104 (as a section of the subgenus *Polymellicta* Lastukhin, 2003), **syn. nov.** Type species by original designation: *Melitaea asteria* Freyer, 1828.

Paramellicta Lastukhin, 2003: 101, 103 (as a section of the subgenus *Mellicta* Billberg, 1820), **syn. nov.** Type species by original designation: *Melitaea parthenoides* Keferstein, 1851.

Polymellicta Lastukhin, 2003: 101, 104 (as a section of the subgenus *Polymellicta* Lastukhin, 2003), **syn. nov.** Type species by original designation: *Melitaea aurelia* Nickerl, 1850.

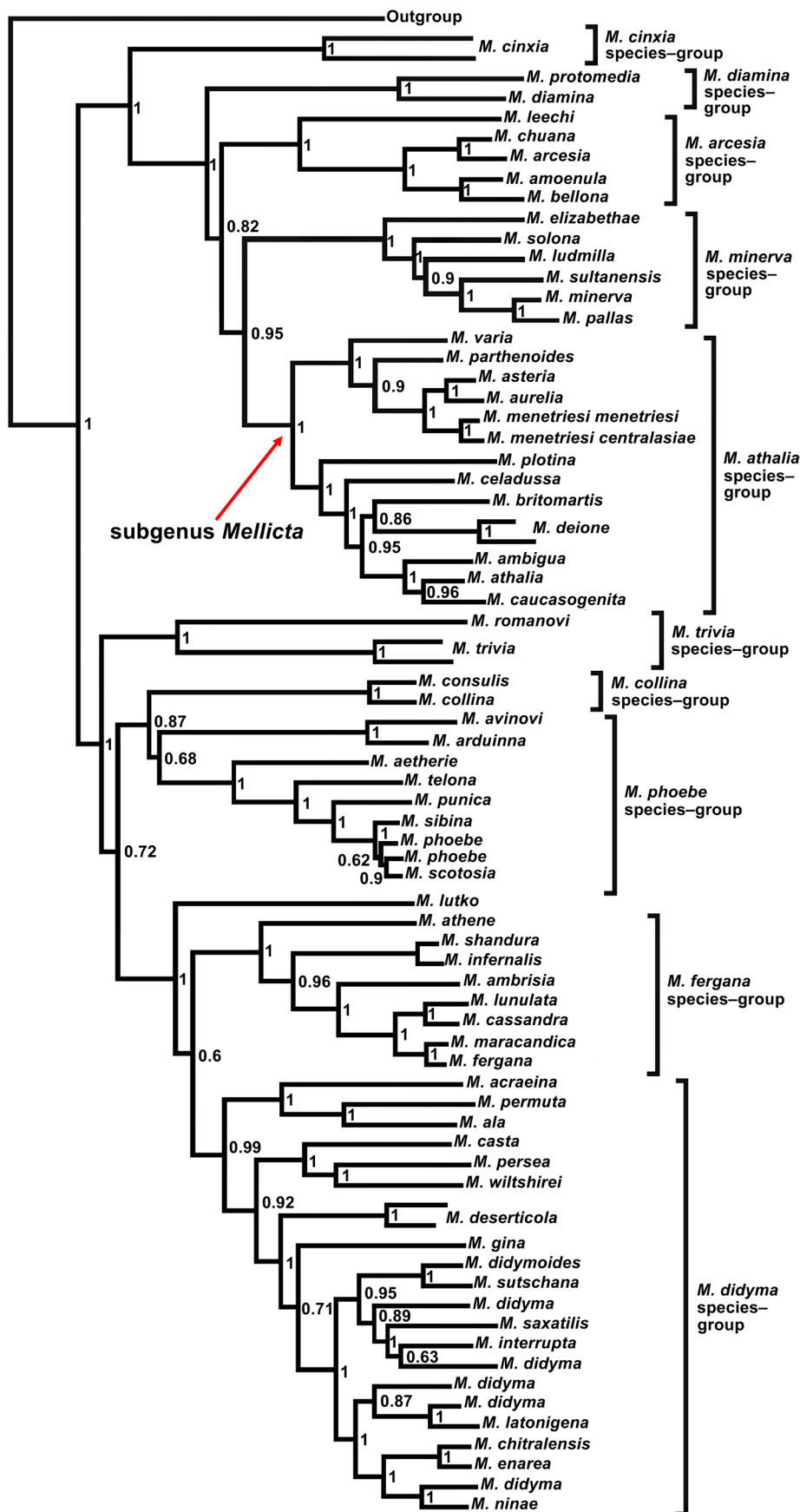
Polymellicta Lastukhin, 2003: 101, 104 (as a subgenus of the genus *Mellicta* Billberg, 1820), **syn. nov.** Type species by original designation: *Melitaea aurelia* Nickerl, 1850.

Promellicta Lastukhin, 2003: 101, 103 (as a section of the subgenus *Promellicta* Lastukhin, 2003), **syn. nov.** Type species by original designation: *Melitaea plotina* Bremer, 1861.

Promellicta Lastukhin, 2003: 101, 103 (as a subgenus of the genus *Mellicta* Billberg, 1820), **syn. nov.** Type species by original designation: *Melitaea plotina* Bremer, 1861.

The results of molecular studies (Leneveu et al., 2009; Long et al., 2014) confirmed the monophyly of *Mellicta* (Fig. 1); however, they indicated that the genus *Melitaea* s. str. is a paraphyletic group. Consequently, there has been a growing tendency to consider *Mellicta* as a subgenus or a group of species within the large genus *Melitaea*, a concept that is now almost universally accepted (Dubatolov et al., 2019; Dincă et al., 2021; Tahami et al., 2021; Lukhtanov et al., 2021; Kovalenko & Kolesnichenko, 2023; etc.).

According to Article 10.4 of the International Code of Zoological Nomenclature (ICZN, 1999), a uninominal name proposed for a genus-group division of a genus, even if proposed for a secondary (or further) subdivision, is deemed to be a subgeneric name even if the division is denoted by terms such as "section" or "division". Based on this article and the data provided above, the following taxa described by Lastukhin (2003) should be considered junior synonyms of the subgenus *Mellicta* Billberg, 1820: *Mediomellicta* Lastukhin, 2003, **syn. nov.**, *Monomellicta* Lastukhin, 2003, **syn. nov.**, *Neomellicta* Lastukhin, 2003, **syn. nov.**, *Oreomellicta* Lastukhin, 2003, **syn. nov.**,



Paramellicta Lastukhin, 2003, **syn. nov.**, *Polymellicta* Lastukhin, 2003, **syn. nov.**, and *Promellicta* Lastukhin, 2003, **syn. nov.**

Acknowledgements

We would like to express our sincere gratitude to A.A. Lastukhin and L.V. Egorov (both from Cheboksary, Chuvash Republic, Russia) for providing rare editions from the library of the Prisurskiy Nature Reserve. We also extend our thanks to the anonymous reviewers for their valuable comments and advice.

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Fig. 1. Bayesian phylogenetic tree for the genus *Melitaea*, according to the analysis of three genes: cytochrome oxidase subunit I (COI, 1487 bp), elongation factor-1a (EF-1a, 1240 bp), and wingless (Wgl, 403 bp) (after Leneveu et al., 2009, with modifications).

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Editorial responsibility: D.A. Gapon