

The identity of the type material of the subspecies of *Melitaea phoebe* ([Denis & Schiffermüller], 1775) described by Emilio Turati (Lepidoptera: Nymphalidae)

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Abstract

Two taxa described by Turati in 1920 as subspecies of *Melitaea phoebe* ([Denis & Schiffermüller], 1775), are examined from high resolution photographs. *M. phoebe phoebina* Turati, 1920 is identified from morphological features as *M. ornata* Christoph, 1893, and *M. phoebe rostagnoi* Turati, 1920, is confirmed as *M. phoebe*. The quadrimomial *M. phoebe rostagnoi sterlineata* Turati, 1920 from the same locality as subsp. *rostagnoi* is also confirmed as *M. phoebe*.

Keywords: Lepidoptera, Nymphalidae, *Melitaea phoebe*, type material, Turati.

La identidad del material tipo de las subespecies de *Melitaea phoebe* ([Denis & Schiffermüller], 1775) descritas por Emilio Turati (Lepidoptera: Nymphalidae)

Resumen

Se examinan dos taxones descritos por Turati en 1920 como subespecies de *Melitaea phoebe* ([Denis & Schiffermüller], 1775), a partir de fotografías de alta resolución. *M. phoebe phoebina* Turati, 1920, se identifica a partir de las características morfológicas como *M. ornata* Christoph, 1893 y *M. phoebe rostagnoi* Turati, 1920, se confirma como *M. phoebe*. El cuadrinomio *M. phoebe rostagnoi sterlineata* Turati, 1920, procedente de la misma localidad que la subespecie *rostagnoi*, también se confirma como *M. phoebe*.

Palabras clave: Lepidoptera, Nymphalidae, *Melitaea phoebe*, material tipo, Turati.

Introduction

In the article by Russell et al. (2020), the authors were unable to report on the identities of the subspecies of *Melitaea phoebe* ([Denis & Schiffermüller], 1775) described by Emilio Turati in 1920, because the entomological collections in the Museo Regionale di Scienze Naturali, Torino, Italy (MRSN) were not accessible, due to ongoing building works. However, the collections have now become available. Thus, it is now possible to confirm the specific identities of *M. phoebe phoebina* Turati, 1920 (p. 222 and Tav. II, Figures 4 ♂♂ and 5 ♀♀) [Type Locality: Italy, Calabria, Aspromonte, 1400 m] and *M. phoebe rostagnoi* Turati, 1920 (p. 223 and Tav. II, Figures 10-12) [Type Locality: Italy, Roma, Monte Autore]. Two figures (Figures 1-2) are included to demonstrate the differences in morphology between *M. phoebe* and *M. ornata*.

Identifications

Melitaea phoebe phoebina: Nekrutenko (1993, p. 129) recorded the details of the labels present on the pins of the two females of this subspecies, which he recognized as syntypes and added appropriate labels indicating this. From an examination of the detailed photographs provided (Figures 3A, B) (see Acknowledgements), it can be seen that the antennae are spatulate and the pre-marginal black markings on the undersides are triangular, not touching the intervening veins. These characters are typical of *M. ornata* Christoph, 1893 (see Figure 1) rather than those of *M. phoebe*, in which the antennae are club shaped and the submarginal black markings arcuate and touching the intervening veins (see Figure 2). Only the figured specimen has the orange ‘Type’ label in Turati’s handwriting on the pin. A label has been added indicating that taxon *phoebina* is *M. ornata* and not *M. phoebe* (Figure 3C); a similar label indicating its correct identity has been added to the other syntype.

Note: San Luca, Calabria (the origin of the syntype not illustrated), lies at the eastern end of the Aspromonte Mountain range; thus Nekrutenko gave the Type Locality of this subspecies as ‘Aspromonte dai 1400 m’.

Melitaea phoebe rostagnoi: Nekrutenko (1993, p. 129) recorded the details of the labels on the pins of the 2 ♂♂ and 3 ♀♀ specimens he recognised as syntypes, added appropriate labels and provided a Type Locality of ‘Monte Autore, province of Roma, Italy’. None of these specimens has a ‘type’ label in Turati’s handwriting. A female syntype is figured (Figures 4A, B), from which it can be seen that it exhibits the morphological characters typical of *M. phoebe*: club shaped antenna, pointed forewing apices and the submarginal black markings are arcuate and touching the intervening veins. The specimens were captured as follows: ♂ 20 August 1909, ♂ 10 September 1909, ♀ 5 September 1909, ♀ 5 September 1909 and ♀ 12 September 1909, indicating that these are all second brood specimens. It is possible that this is the reason why Turati gave them subspecific status. It is confirmed that the taxon *rostagnoi* is a subspecies of *M. phoebe* (Figure 4C).

The variety(?) of this form, *M. phoebe rostagnoi sterlineata* Turati, 1920, is represented in the collection by a pair of specimens taken on 5 and 26 June 1908, thus first brood specimens, also from Monte Autore. The quadrinomial infrasubspecific name *Melitaea phoebe rostagnoi sterlineata* Turati, 1920, is not regulated by the nomenclatural Code; for the record it is a homonym of the quadrinomial *Melitaea aurinia comacina sterlineata* Turati, 1920.

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Figures 1-4. 1. *Melitaea ornata* female underside, Italy, Calabria, Consenza, San Fili, Monte Martinello, 600 m, 3 June 1913 (Stauder Leg) © W. J. Tennent. 2. *Melitaea phoebe* female underside, Italy, Calabria, Consenza, San Fili, Monte Martinello, 880 m, 10 June 2007. © P. Russell. 3 A-C. *Melitaea phoebe phoebina* Turati, 1920, female upperside, underside and labels on pin, respectively. 4 A-C. *Melitaea phoebe rostagnoi* Turati, 1920, female upperside, underside and labels on pin, respectively. © MRSN, Italy.