

## ***Colias hyale sareptensis* Alphéraky, 1875, and its name-bearing type (Lepidoptera: Pieridae)**

ROBERT WORTHY

10 The Hill, Church Hill, Caterham, Surrey CR3 6SD, U.K.  
castnia@btopenworld.com

GERARDO LAMAS

Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Apartado 14–0434,  
Lima-14, Peru  
glamasm@unmsm.edu.pe

### **Abstract**

A new lectotype designation by Korb (2013) for *Colias hyale sareptensis* Alphéraky, 1875 is rejected and the previous lectotype designation by Grieshuber, Worthy & Lamas (2006) reinstated.

**Key words:** Nomenclature, taxonomy, Lepidoptera, Pieridae, *Colias*, *Colias alfajariensis*, *Colias hyale sareptensis*, lectotype designation

### **Introduction**

Grieshuber, Worthy & Lamas (2006) submitted a proposal to the International Commission on Zoological Nomenclature (ICZN) to conserve the specific name *Colias alfajariensis* Ribbe, 1905, by giving it precedence over three senior subjective synonyms that they had found. This was Case 3334 which was accepted by the commission in Opinion 2180 (ICZN, 2007).

One of the senior synonyms was *sareptensis* Alphéraky, 1875. The name was first coined by Staudinger (1871) as ‘No. 64.a. *Col. Erate* ab. *Sareptensis*’ (1871, p. xxxvii) and ‘64. *Hyale* ... ab. (an hibr?) *Sareptensis*’ (1871, p. 5). The numbering of the species in the text of Staudinger’s Catalogue (1871, p. 5) indicates that the linking with *C. erate* (Esper, [1805]) in the list of the new designations (p. xxxvii) was a lapsus. Staudinger’s name ‘*sareptensis*’ was unavailable from its first publication in 1871 because of the use of the term ‘ab[erration]’. It is therefore of infrasubspecific status (Art. 45.6.2 of the International Code of Zoological Nomenclature – ICZN, 1999). Staudinger never applied the name ‘*sareptensis*’ to a population or a group of populations.

Alphéraky (1875) then made the name available by publishing it in the combination ‘*Colias Hyale* L. var. *Sareptensis*’. He inferred that Staudinger considered *sareptensis* to be a hybrid between *C. hyale* (Linnaeus, 1758) and *C. erate*, and indeed indicated that he had seen such hybrid specimens himself. He then said: ‘However, such specimens seem to me very different from the constant variety var. *Sareptensis* Stgr., which I saw in Dr. Staudinger’s collection, and which I collect every year near Taganrog’. After describing the insect, he also said: ‘... this form is very common and belongs to the type *Hyale* ... [the *C. hyale* group of species]’ and: ‘I propose to consider var. *Sareptensis* Stgr. not as an individual form but a permanent form characteristic of southern and south-eastern Russia’. This description makes the name available at subspecific rank (Art. 45.6.4).

There is no doubt that what Alphéraky intended to describe is what we now know as *C. alfacariensis* Ribbe, 1905. Staudinger's collection is now in the Museum für Naturkunde, Berlin and currently comprises four males and a yellow female, all of which are specimens of *C. erate*. However, Alphéraky had the opportunity to examine those specimens when he worked under Staudinger's supervision in Dresden between 1871 and 1873. He found it to comprise mixed material of *C. erate* and *C. alfacariensis* so the series was obviously more extensive then.

In their proposal, Grieshuber, Worthy & Lamas (2006) designated a lectotype for *C. hyale sareptensis* to avoid confusion as to what the taxon represented, this was because the syntypes comprised two different species. As Alphéraky (1875) redescribed the taxon, the type material of Alphéraky's *sareptensis* comprises the series which Alphéraky saw in Staudinger's collection, and crucially, Alphéraky's own material which he used for the description. Examination of part of Alphéraky's own material of *sareptensis* in St. Petersburg shows that they do indeed belong to *C. alfacariensis*. Our original lectotype designation used a syntype from Alphéraky's own material which corresponds to what Alphéraky intended the taxon to represent.

### Discussion

The paper by Korb (2013) was recently brought to our attention by Alexander Kir'yanov (pers. comm. to RW). In it, Korb rejects our original lectotype designation as the specimen selected was not part of Staudinger's original material 'The lectotype designation of *Colias hyale sareptensis* Alphéraky, 1875, by Grieshuber, Worthy & Lamas (2006: 110) should be rejected, as it was invalid because it was not selected from the series of syntypes'. Art. 1.3.4 of the Code states explicitly that infrasubspecific entities are 'excluded from the provisions of The Code', implying that such entities cannot have name-bearing types because they do not form part of the species group (Art. 45.1). Furthermore, the name *sareptensis* was made available by Alphéraky in 1875 under Art. 45.5.1, NOT under 45.6.4.1, and thus it must be attributed to Alphéraky, 1875; this is because Staudinger used the term 'ab.', and not one of the terms deemed to confer subspecificity. As the name *sareptensis* became available in 1875 by Alphéraky's action, its type series consists of ALL the specimens included by Alphéraky in the nominal taxon (Art. 72.4.1); that means the specimens in Alphéraky's collection and also those he examined in Staudinger's collection (and were not excluded by Alphéraky from his concept of *sareptensis*) were all syntypes of Alphéraky's name. Our 2006 designation of a lectotype was made under Arts. 74.1 and 74.7, and therefore Korb's 2013 'designation' of a lectotype is not only superfluous, but also invalid under Art. 74.1.1 as our original lectotype designation is valid. Because only specimens of *C. erate* are left in Staudinger's original series, it would also have the unfortunate consequence of transferring *sareptensis* from a synonym of *C. alfacariensis* to a synonym of *C. erate*, which is contrary to Alphéraky's original intention.

All of this shows a profound lack of understanding of Zoological Nomenclature by Korb, and in particular, a constant misapplication of the Code. Unfortunately, this is a long-standing problem with Korb; Häuser & Nekrutenko (1998) published a critique of a paper by Korb (1997) in which he introduced 15 new

species-group names for various Palaearctic Papilionidae and Nymphalidae. In their paper Häuser & Nekrutenko (1998) showed that 14 of these names were either unavailable or objectively invalid, they also said 'When trying to check some of the references cited in that paper it became evident that all citations were incorrect or wrongly interpreted, and that the author was not familiar with certain rules and provisions of the International Code of Zoological Nomenclature (ICZN) nor with the literary sources he referred to'. They further urged editors of scientific periodicals to carefully check manuscripts through the peer review system in order to prevent the proliferation of superfluous names, a sentiment with which we strongly agree.

Accordingly, we have to express our surprise and disappointment at the failure of the peer review system to spot the problems with this new lectotype designation and prevent the publication of Korb's (2013) paper.

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