

# The identity of *Bombyx jesuita* Fabricius, 1775 (Lepidoptera: Notodontidae, Dioptinae, Josiini)

Vitor O. Becker

## Abstract

The identity of *Bombyx jesuita* Fabricius, 1775, is established and assigned to *Josia* Hübner, [1819] as *J. jesuita* (Fabricius, 1775), comb. nov., senior synonym of *Bombyx fulvia* Cramer, 1779, syn. nov., *J. ligula* Hübner, [1808], syn. nov., and *J. tenuivitta* Butler, 1878, syn. nov. *Lyces fulvia* (Hübner, [1822]), stat. rev. (= *Josia aurimutua* Walker, 1854, syn. nov.), is reinstated.

**Keywords:** Lepidoptera, Notodontidae, Dioptinae, Josiini, *Josia*, *Lyces*, *Passiflora*, hostplant, synonyms, new combination, Neotropical.

## La identidad de *Bombyx jesuita* Fabricius, 1775 (Lepidoptera: Notodontidae, Dioptinae, Josiini)

## Resumen

Se establece la identidad de *Bombyx jesuita* Fabricius, 1775 y se asigna a *Josia* Hübner, [1819] como *J. jesuita* (Fabricius, 1775), comb. nov., sinónimo más antiguo de *Bombyx fulvia* Cramer, 1779, syn. nov., *J. ligula* Hübner, [1808], syn. nov. y *J. tenuivitta* Butler, 1878, syn. nov. *Lyces fulvia* (Hübner, [1822]), stat. rev. (= *Josia aurimutua* Walker, 1854, syn. nov.), se reincorpora.

**Palabras clave:** Lepidoptera, Notodontidae, Dioptinae, Josiini, *Josia*, *Lyces*, *Passiflora*, hostplant, sinonimos, combinación nueva, Neotropical.

## A identidade de *Bombyx jesuita* Fabricius, 1775 (Lepidoptera: Notodontidae, Dioptinae, Josiini)

## Resumo

A identidade de *Bombyx jesuita* Fabricius, 1775, é estabelecida e atribuída a *Josia* Hübner, [1819] como *J. jesuita* (Fabricius, 1775), comb. nov., sinônimo sênior de *Bombyx fulvia* Cramer, 1779, syn. nov., *J. ligula* Hübner, [1808], syn. nov. e *J. tenuivitta* Butler, 1878, syn. nov. *Lyces fulvia* (Hübner, [1822]), stat. rev. (= *Josia aurimutua* Walker, 1854, syn. nov.), é reintegrada.

**Palavras-chave:** Lepidoptera, Notodontidae, Dioptinae, Josiini, *Josia*, *Lyces*, *Passiflora*, hostplant, sinônimos, combinação nova, Neotropical.

## Introduction

The identity of *Bombyx jesuita* Fabricius, 1775, has been uncertain since its description, being doubtfully associated with *Lyces aurimutua* (Walker) (Hering, 1925, p. 537, Miller, 2009, p. 773). It seems that all the authors who mentioned it did not examine the type. Upon request, images of the type

and labels (Figures 1, 3) were provided by O. Karsholt, from the Zoological Museum, University of Copenhagen (ZMUC), making it possible to establish its identity.

### Material and methods

This work is based on the pertinent literature, on the images of the type specimen and on the author's collection (VOB).

### Results and discussion

Examination of the images of the type, the literature, and the series of specimens in (VOB), made it possible to establish the identity of this species.

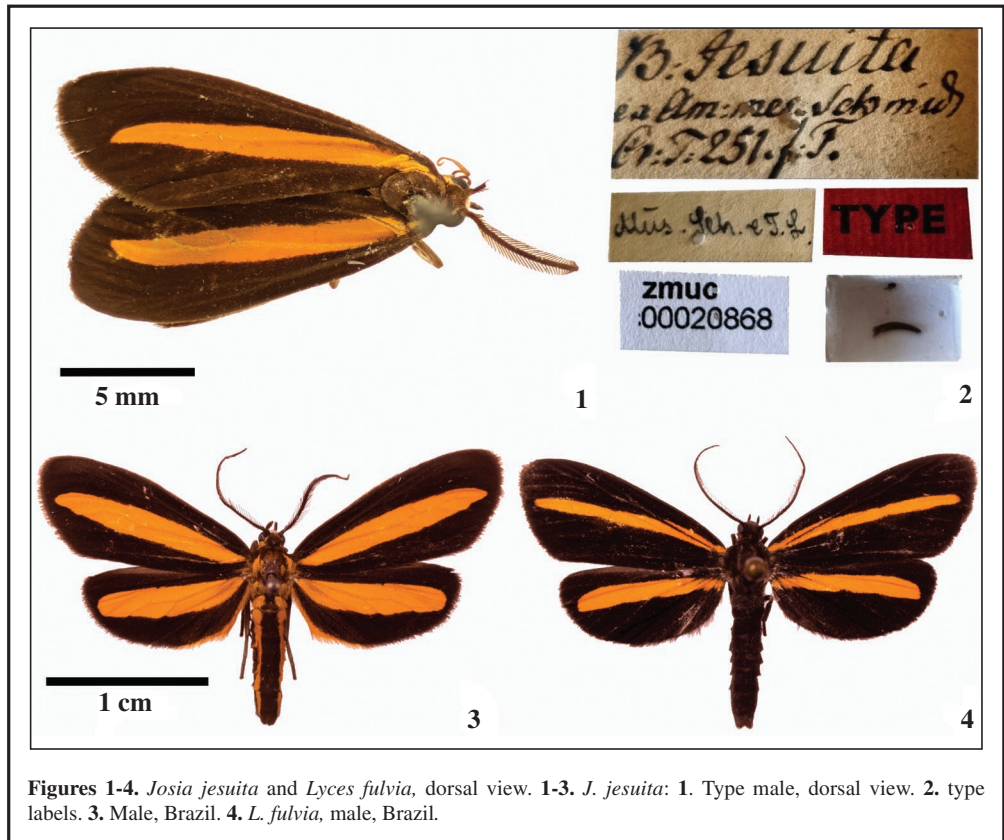
*Josia jesuita* (Fabricius, 1775), **comb. nov.** (Figures 1-3)

*Bombyx jesuita* Fabricius, 1775, p. 586. Type ♂, [SURINAM: Paramaribo] "In Indiis" (ZMUC) [image examined].

*Bombyx fulvia* Cramer, 1779, p. 101. Syntype ♂, SURINAM: [Paramaribo] (NHMUK) [not examined]. **Syn. nov.**

*Hypocrita ligula* Hübner, [1808], pl. [180]. Types (presumably lost) [not examined]. **Syn. nov.**

*Josia tenuivitta* Butler, 1878: 61. Syntype ♂, BRAZIL: PA, Serpa (Bates) (NHMUK) [not examined]. **Syn. nov.**



**Figures 1-4.** *Josia jesuita* and *Lyces fulvia*, dorsal view. 1-3. *J. jesuita*: 1. Type male, dorsal view. 2. type labels. 3. Male, Brazil. 4. *L. fulvia*, male, Brazil.

Remarks: As clearly shown by the image of the type of *B. jesuita* (Figure 1), it matches perfectly the specimens belonging to *Josia ligula* (Figure 3) a very common species found all over the Guiano-Amazonian region (Miller, 2009, p. 818). *B. jesuita* has been doubtfully associated with *Lyces aurimutua* (Walker, 1854) (Figure 4). The two species look similar, however, the orange fascia along FW is wider in *J. jesuita* than that on *L. aurimutua*, and in *L. aurimutua* this fascia is crossed by a thin black line from base to the basal third of the upper margin (Rs), missing in *J. jesuita*. Also, the two species are allopatric: *J. jesuita* ranges from the Amazonian region south to Minas Gerais (specimens from Sete Lagoas in VOB), whereas *L. aurimutua* occurs only along the lowland coast of Southern Brazil (Miller, 2009, p. 774). Schintlmeister (2013, p. 246) following the former authors (Prout, 1918, p. 43; Miller (2009, p. 773) accepted the wrong synonymy, reinstating *B. jesuita*, the oldest valid name, as the senior synonym, belonging to *Lyces* Walker, 1854. Consequently *L. fulvia* (Hübner, [1822]), stat. rev., has to be reinstated, with *J. aurimutua* (Walker, 1854), syn. nov., as a junior synonym. As mentioned above, the type-material of the other names listed as synonyms were not examined. The synonymy follows Miller (2009, p. 817), who studied their types, except that of *Hypocrita ligula* Hübner, which are presumably lost).

Fabricius (1775, p. 586) gives “Indiis” as the type locality. This can be interpreted as “West Indies”, as in the case with the nymphalid butterfly *Archaeoprepona amphimachus* (F., 1775) [described as *Papilio amphimachus* “in Indiis” (Fabricius, 1775, p. 457). In those times the northern coast of South America was commonly regarded as part of the region.

Hostplant: One of the specimens in VOB was reared from a caterpillar feeding on the leaves of *Passiflora* sp. (Passifloraceae) at the Serra Bonita Reserve, Camacã, Bahia.

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V. O. BECKER

Vitor O. Becker  
Reserva Serra Bonita  
P. O. Box 01  
45.880-000 Camacan, BA  
BRASIL / BRAZIL  
E-mail: becker.vitor@gmail.com  
<https://orcid.org/0000-0001-9904-1176>

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