

Marialma Becker, a new genus of Neotropical Larentiinae (Lepidoptera: Geometridae)

Vitor O. Becker

Abstract

Marialma Becker, gen. nov., is proposed to accommodate *Sabulodes? magicaria* Felder & Rogenhofer (1875) [*Marialma magicaria* (Felder & Rogenhofer, 1875)] comb. nov.

Keywords: Lepidoptera, Geometridae, Larentiinae, *Sabulodes*, description, new combination, new genus, Neotropical.

Marialma Becker, un nuevo género de Larentiinae Neotropical (Lepidoptera: Geometridae)

Resumen

Se propone *Marialma* Becker, gen. nov., para acomodar *Sabulodes? magicaria* Felder & Rogenhofer (1875) [*Marialma magicaria* (Felder & Rogenhofer, 1875)] comb. nov.

Palabras clave: Lepidoptera, Geometridae, Larentiinae, *Sabulodes*, descripción, combinación nueva, género nuevo, Neotropical.

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Resumo

Marialma Becker, gen. nov., é proposto para acomodar *Sabulodes? magicaria* Felder & Rogenhofer (1875) [*Marialma magicaria* (Felder & Rogenhofer, 1875)] comb. nov.

Palavras-chave: Lepidoptera, Geometridae, Larentiinae, *Sabulodes*, descrição, combinação nova, gênero novo, Neotropical.

Introduction

The elegantly patterned species “*Sabulodes? magicaria*” has been without an appropriate generic placement since it was described by Felder & Rogenhofer (1875, pl. 122, fig. 10), who described the species in *Sabulodes* Guenée, [1858] with a question mark. *Sabulodes* is a New World genus of Ennominae (Rindge, 1978), whereas *S. magicaria* is in the subfamily Larentiinae. Fletcher (1979, p. 132) and Scoble (1999, p. 614) listed the species in “*Monarcha*” Warren, a preoccupied, manuscript

name. As the species is not related to any of the described Neotropical Larentiinae genera, a new genus is proposed here to accommodate it.

Material and methods

This work is based on the type-specimen, and on the material belonging to this species in the author's collection (VOB), the collections of other major museums (NHMUK, USNM, CMNH), and on the pertinent literature. Genitalia were prepared following the methods described by Robinson (1976). Terms for morphological characters follow Hodges (1971).

Marialma Becker, gen. nov.

Type-species: *Sabulodes? magicaria* Felder & Rogenhofer, 1875. *Reise Fregatte Novara*, 2(*Abth.*2), pl. 122, fig. 10, by monotypy and present designation.

Monarcha Warren, manuscript, preoccupied name (Vigors & Horsfield, 1826, p. 254) [Aves].

Diagnosis: Large, reddish brown with white lines and brown patches; wings with the ornate pattern along termen imitating feathers. Sexes similar.

Description: Labial palpi porrect, 2nd segment triangular, slightly longer than eye diameter; antenna filiform. Forewing with costa straight, curved before apex; apex acute; termen oblique, excurved at middle, dentate (indentations in the vein interspaces), R4+R5 stalked from middle, R5 following costa to apex; M1+Rs connected at upper angle of cell; M2 from mid cell, equidistant to M1 and M3; M3 and Cu1 connected at lower angle of cell; Cu2 from distal third of cell. Hind wing also with dentate termen, indentations between vein interspaces; Sc and Rs+M1 connected at upper angle of cell; Rs+M1 stalked at 1/3 beyond cell, M2 equidistant to M1 and M3, M3 from lower angle of cell, Cu1 from before angle, Cu2 from mid cell.

Male genitalia (Figure 2): Uncus a short, curved ventrad knob, densely covered with minute setae. Gnathos divided into a pair of short, thick, rough arms. Valva longer than tegumen, four times as long as wide, slightly bent dorsal at distal third, margins nearly parallel, saccular margin not differentiated. Vinculum a shallow, broad triangle. Juxta a short, wide plate. Aedeagus (Figure 3) shorter than valva, slightly curved ventrad; vesica without cornuti or scobination.

Female genitalia (Figure 4): Small in relation to the size of the abdomen, not extending beyond basal margin of 8th sternite; apophysis posterioris 1/3 as long as anterioris; ostium bursae narrow, same diameter as ductus bursae; ductus bursae membranous, as long as corpus bursae diameter; corpus bursae sclerotized and wrinkled before ductus bursae.

Remarks: This beautiful species is unique among the Neotropical Larentiinae, and its relationship with other taxa cannot be established with certainty. Brehm et al. (2019, p. 464) suggested that it might be a member of the Psaliadini, but further study must be carried out in order to establish its relationship.

Etymology: After Dr. Maria Alma Solis, Curator, USNM, for all her long, generous, collaboration.

Marialma magicaria (Felder & Rogenhofer, 1875), **comb. nov.** (Figures 1-4)

Sabulodes? magicaria Felder & Rogenhofer, 1875. *Reise Fregatte Novara*, 2(*Abth.*2), pl. 122, fig. 10. Syntypes (&), [COLOMBIA]: Bogotá (Lindig) (NHMUK).

Diagnosis: Large, reddish brown with white lines and brown patches; wings with the ornate pattern along termen imitating feathers.

Description: Male (Figure 1) Forewing length 28-30 mm 60-65 mm wingspan; female 35 mm (75 mm wingspan). Reddish-brown. Head and thorax golden ochreous; labial palpus brown, golden ochreous dorsally; antenna dark fuscous. Abdomen brown, with thin row of white scales at the posterior margin of tergites. Fore and mid coxae golden ochreous, tarsi brown. Forewing reddish-brown; costa, an oblique fascia from before mid costa to before mid-dorsum, and patches beyond postmedial band, golden ochreous; crossed with four white lines: first [antemedial band] straight, from

basal fourth of costa to dorsum; second [median line], from mid costa to mid dorsum; third from distal fourth of cost, curved towards termen, to M3, then curved inwards, forming lunules between vein interspaces, to Cu2, then curved outwards to before tornus; termen with feather-like, brown patches on veins fourth short, from before apex to R5. Hind wings dark fuscous; antemedial and postmedial bands diffuse, ill-defined; termen with the same feather-like patches as in the Forewings.

Male and female genitalia (Figures 2-4): as described for the genus (see above).

Distribution: Colombia to Bolivia, in the Andes, at high elevations.

Remarks: *Marialma magicaria* was proposed from an unknown number of females, presumably a single one. This is one of the most beautiful Larentiinae species in the Neotropical region.

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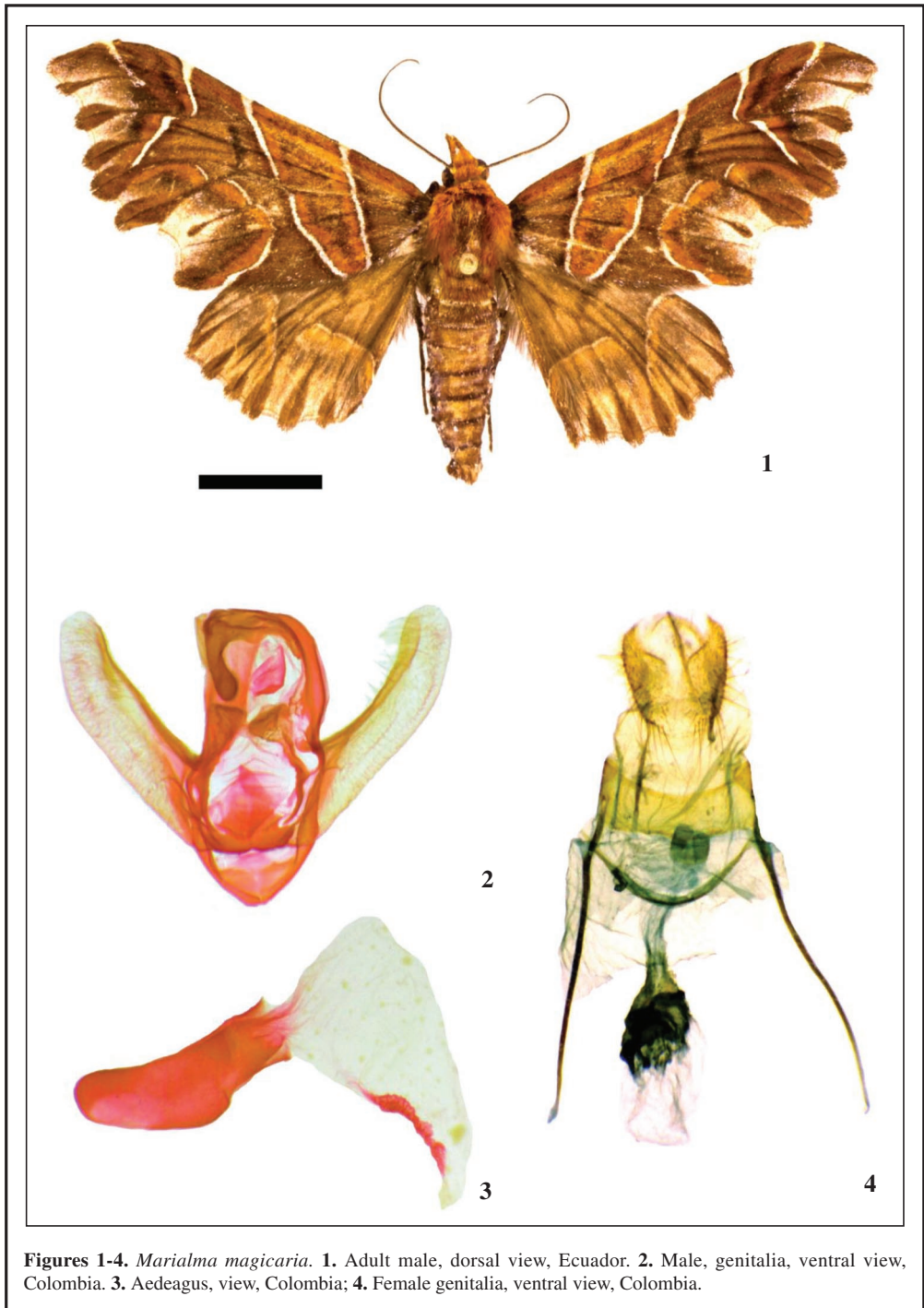
Vitor O. Becker
Reserva Serra Bonita
P. O. Box 01
45.880-000 Camacan, BA
BRASIL / BRAZIL
E-mail: becker.vitor@gmail.com
<https://orcid.org/0000-0001-9904-1176>

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Figures 1-4. *Marialma magicaria*. **1.** Adult male, dorsal view, Ecuador. **2.** Male, genitalia, ventral view, Colombia. **3.** Aedeagus, view, Colombia; **4.** Female genitalia, ventral view, Colombia.