

# Description of the females of *Automeris lauroia* OTTICICA, 1965 and *Molippa pearsoni* LEMAIRE, 1982 from Brazil (Lepidoptera: Saturniidae, Hemileucinae, Hemileucini)

Carlos G. C. MIELKE and Ryan A. ST. LAURENT

Carlos G. C. MIELKE, Caixa Postal 1206, 84.145–000 Carambeí, Paraná, Brazil; cmielke1@uol.com.br

Ryan A. ST. LAURENT, McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, University of Florida, 3215 Hull Road, Gainesville, FL 32611-2710, USA. Department of Biology, University of Florida, Gainesville, FL 32611, USA; rstlaurent@flmnh.ufl.edu

**Abstract:** The females of *Automeris lauroia* OTTICICA, 1965 and *Molippa pearsoni* LEMAIRE, 1982 are figured and described for the first time. The geographical distributions of both species are updated.

**Key words:** distribution, endemism, morphology, Neotropical fauna

**Beschreibung der Weibchen von *Automeris lauroia* OTTICICA, 1965 und *Molippa pearsoni* LEMAIRE, 1982 aus Brasilien (Lepidoptera: Saturniidae, Hemileucinae, Hemileucini)**

**Zusammenfassung:** Die Weibchen von *Automeris lauroia* OTTICICA, 1965 und *Molippa pearsoni* LEMAIRE, 1982 werden erstmals abgebildet und beschrieben. Die geografische Verteilung wird aktualisiert.

## Introduction

OTTICICA (1965) and LEMAIRE (1982) described *Automeris lauroia* OTTICICA, 1965 and *Molippa pearsoni* LEMAIRE, 1982, respectively, based only on male specimens. Both species are poorly represented in collections, in spite of the collecting efforts within the Brazilian Cerrado (CAMARGO & BECKER 1999). Recently, the females of these two species became available and thus are described and figured here for the first time. Gaps in our knowledge of the unknown sexes of tropical American Saturniidae have been similarly complemented by MIELKE et al. (2005a, b), which was particularly made possible after the complete Hemileucinae revision of LEMAIRE (2002). The geographical distributions of *A. lauroia* and *M. pearsoni* are here updated as well, further broadening our understanding of these rarely reported moths.

## Collections abbreviations

|      |                                                                                                          |
|------|----------------------------------------------------------------------------------------------------------|
| AMNH | American Museum of Natural History, New York, New York, USA.                                             |
| CGCM | Coll. Carlos G. C. MIELKE, Curitiba, Paraná, Brazil.                                                     |
| CJC  | Coll. John CISESKI, Stevens Point, Wisconsin, USA.                                                       |
| COM  | Coll. Olaf H. H. MIELKE, Curitiba, Paraná, Brazil.                                                       |
| CPAC | Embrapa Cerrados Collection, Planaltina, Distrito Federal, Brazil.                                       |
| CVOB | Coll. Vitor O. BECKER, Camacan, Bahia, Brazil.                                                           |
| DZUP | Coll. Padre Jesus S. MOURE, Dept. de Zoologia, Universidade Federal do Paraná, Curitiba, Paraná, Brazil. |
| MNHN | Muséum national d'Histoire naturelle, Paris, France.                                                     |
| NHMK | The Natural History Museum, London, United Kingdom.                                                      |

## *Automeris lauroia* OTTICICA, 1965

Figs. 1a, 1b, 2a, 2b.

♂ (Figs. 1a, 1b): see LEMAIRE (2002) for redescription of habitus and genitalia.

♀ (Figs. 2a, 2b): Wingspan 76 mm, forewing length 41 mm. Very similar to male, with a more rounded appearance of both fore- and hindwing. In the latter, ground-colour dark grey instead of very dark brown as in the male, dorsally and ventrally, with a thinner and darker yellow postmedial line.

**Examined material** (in total 18 ♂♂, 1 ♀, all Brazil): Goiás: 7 ♂♂, Alto Paraíso de Goiás, 14°7'21" S, 47°44'10" W, 1204 m: 13.–18. XI. 2014, CORRÊA leg. (CPAC 26.490, 27.254, 27.339, 25.827, 25.907; CPAC) and 4. x. 2013, CORRÊA leg. (CPAC 25.787, 25.788; CPAC). 1 ♂, Alto Paraíso de Goiás, 1100 m: 4. x. 1985, V. O. BECKER leg. (CGCM 12.406; CGCM). 5 ♂♂, Luziânia, Cilu (between Luziânia and Vianópolis) [1080 m], N. TANGERINI leg.: 6. x. 1966 (22.295; DZUP), 21. x. 1968 (CGCM 21.442; CGCM), 10. x. 1969 (CJC), 10. x. 1969 (CGCM 20946; CGCM), 23. x. 1967 (MNHN). – Federal District: 1 ♂, Brasília, Fazenda Água Limpa, [1090 m]: 8.–9. I. 2008, F. A. BRITO leg. (CVOB). 2 ♂♂, Brasília, Ecol. Res. IBGE, Hwy BR 251, Km 0, [1190 m]: 19. x. 1978, NEGRETT leg. (CPAC 11.478; CPAC) and x. 1980 (CGCM 21.476; CGCM). 1 ♂, Brasília, [Sobradinho]: 24. II. 1966, O. MIELKE leg. (12.204; COM). 1 ♂, Brasília, Santa Maria: 2. XI. 1970, N. TANGERINI leg. (CGCM 21.299; CGCM). 1 ♀, Planaltina, 15 km NE Planaltina, 980 m: 28. x. 1989, E. ABADIE leg. (CGCM 40.995; CGCM).

**Distribution.** *Automeris lauroia* is known only from localities in the Brazilian Central Plateau at altitudes ranging from about 1000 to 1200 m in Goiás and in the Federal District (Fig. 5). See remarks.

**Host plant.** Unknown.

**Remarks.** LEMAIRE (2002) mentioned the type locality of *A. lauroia* as “Goiás, Ilha do Bananal (Bananal Island)” in the Araguaia river, about 400 km NW from the nearest specimen record. This locality is a lowland in Tocantins state (Fig. 5, white circle). In the original description, OTTICICA (1965) mentions “Bananal. Brasil, Goyas, 23. I. 1960, OLIVEIRA JESUS col.” followed by a note (here translated from Portuguese): “the label refers to a locality within Brasília, the new Brazilian capital”. This statement by OTTICICA confirms that the type locality indicated by LEMAIRE (2002), which was also reiterated by CAMARGO & BECKER (1999), is wrong, as Brasília is distant from Ilha do Bananal and within a different habitat. This piece of



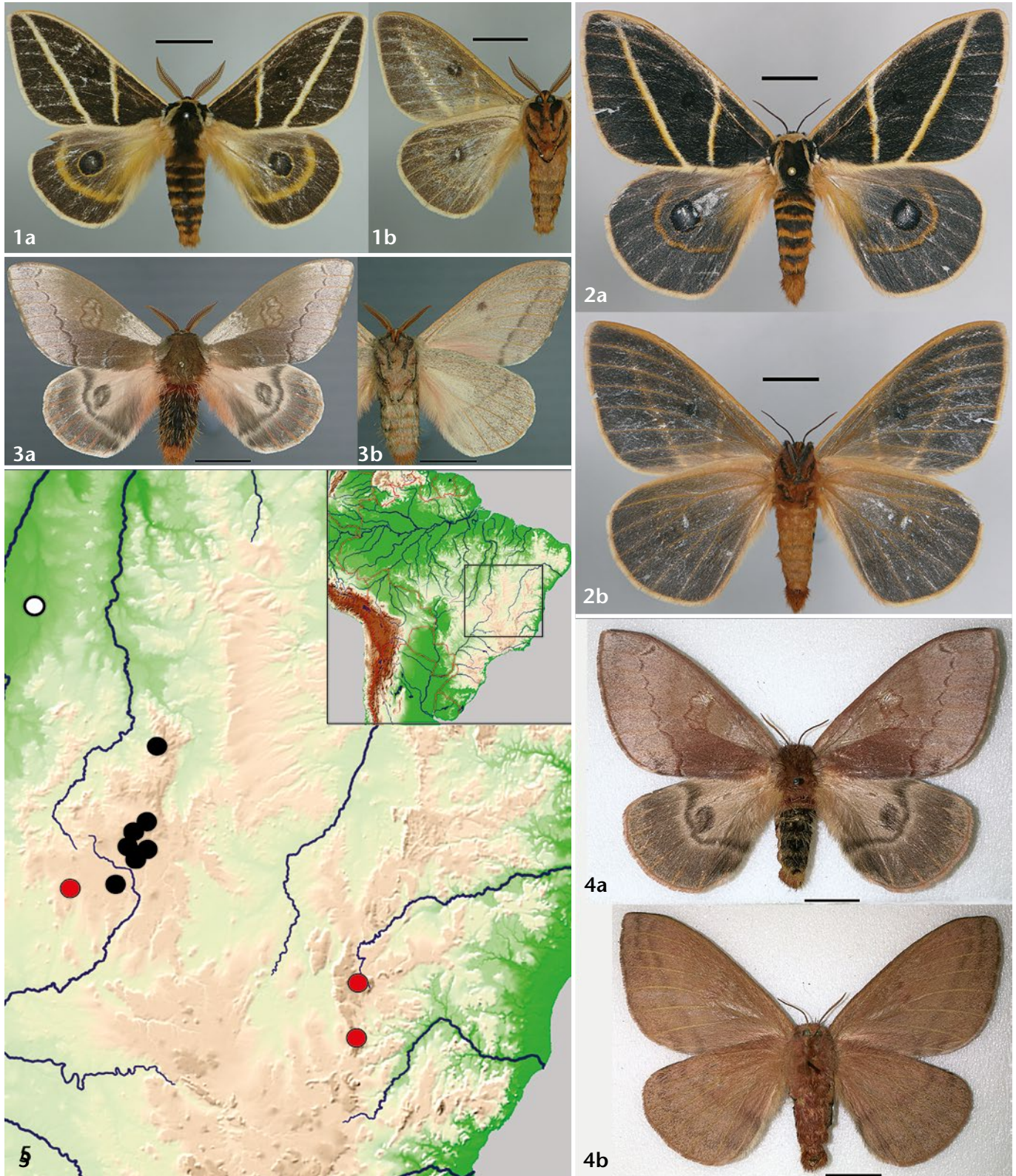
information reveals that *A. lauroia* is an endemic of the higher lands in the Central Plateau of Brazil. According to the collecting dates, it is possible that this species is at least bivoltine, flying from October to February, although no records are available for December. Males were attracted to light at 22:20 and 0:40 h (A. CAMARGO pers. comm.).

***Molippa pearsoni* LEMAIRE, 1982**

Figs. 3a, 3b, 4a, 4b.

♂ (Figs. 3a, 3b): see LEMAIRE (2002) for redescription of habitus and genitalia.

♀ (Figs. 4a, 4b): Wingspan 72 mm, forewing length 40 mm. As in male but with more rounded appearance of



**Figs. 1–2:** *Automeris lauroia* ♂ (CGCM 12.406) dorsal view (1a), ventral view (1b); ♀ (CGCM 40.995) dorsal view (2a), ventral view (2b). — **Figs. 3–4:** *Molippa pearsoni* ♂ (CGCM 41.099) dorsal view (3a), ventral view (3b); ♀ (AMNH) dorsal view (4a), ventral view (4b). — Scale bars = 1 cm. — **Fig. 5:** Geographical distribution of *Automeris lauroia* (black dots) and *Molippa pearsoni* (red dots). The white dot (with black frame) shows the location of Ilha do Bananal (see text).

both fore- and hindwing. Groundcolour of forewing more reddish-brown in hue than very dark olive-brown as in the male.

**Examined material** (in total 9 ♂♂, 1 ♀, all Brazil): Goiás: 1 ♂, Holotype, Campinas [*recte* Goiânia], II. 1934, R. SPITZ leg. (NHMUK). — Minas Gerais: 1 ♂, 1 ♀, Diamantina, [Curralinho], Minas Serrinha, x.-iv., E. COHN [leg.] (AMNH). 2 ♂♂, Datas, 1230 m: 24. x. 1989, C. MIELKE leg. (CGCM 41.099; CGCM) and 21. xi. 1989, C. MIELKE leg. (CGCM 40.869; CGCM). 1 ♂, Paratype, [Santana do Riacho], Serra do Cipó, Auto Palácio, Rio Miguel Quicé, 1300 m: 3.-8. x. 1959, L. TRAVASSOS & H. PEARSON leg. (MNHN). 4 ♂♂, Santana do Riacho, Serra do Cipó, 1043 m: 23. xi. 1989, C. MIELKE leg. (CGCM 40.982, 40.987, 41.080, 41.514; CGCM).

**Distribution.** *Molippa pearsoni* is known from a small number of localities within the Espinhaço Mountains in Minas Gerais at altitudes ranging from 1040 to 1300 m (Fig. 5). This species is also known from the type locality, Campinas (a neighbourhood of Goiânia, the capital of Goiás), which is an intriguing record since no additional specimens have been collected from near this locality, which itself is over 600 km from the other records in central Minas Gerais.

**Host plant.** Unknown.

**Remarks.** In the original description, LEMAIRE (1982) mentioned that the two paratypes were deposited in PEARSON's collection, which was later donated to National Museum of Rio de Janeiro (destroyed by fire in 2018). In fact, one of these paratypes was sent to LEMAIRE in France, and so is now deposited in the MNHN. The locality of Campinorte, Goiás, given by CAMARGO & BECKER (1999), has been erroneously cited (A. CAMARGO pers. com.).

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## References

- CAMARGO, A. J. A., & BECKER, V. O. (1999): Saturniidae (Lepidoptera) from the Brazilian Cerrado: Composition and biogeographic relationships. — *Biotropica*, Lawrence, Kansas, **31** (4): 696–705.
- LEMAIRE, C. (1982): Vingt-huit Saturniidae néotropicaux inédits [Lepidoptera]. — *Annales de la Société entomologique de France* (new series), Paris, **18** (1): 55–88.
- [with contributions by F. BÉNÉLUZ & N. TANGERINI] (2002): The Saturniidae of America. Les Saturniidae Américains (= Attacidae), vol. 4, Hemileucinae. — Keltern (Goecke & Evers); part A: [1]–688, part B: [689]–1388; part C: 143 pp., col. pls. 1–126, ES1–ES14, 143 pp. without pagination.
- MIELKE, C. G. C., NAUMANN, S., & BROSCHE, U. (2005a): Notes on neotropical Saturniidae: Description of the male of *Leucanella memusoides* LEMAIRE, 1973 and the female of *Mielkesia paranaensis* (REGO-BARROS & O. MIELKE, 1968). — *Galathea, Berichte des Kreises Nürnberger Entomologen*, Nürnberg, **Suppl. 15**: 3–11.
- , ——, & —— (2005b): Notes on neotropical Saturniidae: Description of the females of *Citheronia volcan*, *Adeloneivaia minuta*, *Kentroleuca novahollandensis*, *Gamelia remissoides*, and *Arsenura thomsoni thomsoni* (Lepidoptera, Saturniidae). — *Nachrichten des Entomologischen Vereins Apollo*, Frankfurt am Main, **26** (4): 177–180.
- OTICICA FILHO, J. (1965): Um espécie nova do gênero *Automeris* (Lepidoptera, Hemileucinae). — *Boletim do Museu Paraense Emílio Goeldi* (new series), Belém, **55**: 1–6 + 4 pl.

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