

# A new genus and two new species of Tirathabini from the Neotropical region (Lepidoptera: Pyralidae: Galleriinae)

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## Abstract

The genus *Atrigalleria* Becker, gen. n. with two new species: *Atrigalleria chlorogramma* Becker, sp. n., from Ecuador and *A. chlorographa* Becker, sp. n., from Ecuador and Costa Rica are described.

KEY WORDS: Lepidoptera, Pyralidae, Galleriinae, Tirathabini, new genus, new species, distribution, Costa Rica, Ecuador, Neotropical.

## Un género y dos especies nuevos de Tirathabini de la región Neotropical (Lepidoptera: Pyralidae, Galleriinae)

## Resumen

Se describe el género *Atrigalleria* Becker, gen. n. con dos especies nuevas: *Atrigalleria chlorogramma* Becker, sp. n., de Ecuador y *A. chlorographa* Becker, sp. n., de Ecuador y Costa Rica.

PALABRAS CLAVE: Lepidoptera, Pyralidae, Galleriinae, Tirathabini, género nuevo, especies nuevas, distribución, Costa Rica, Ecuador, Neotropical.

## Introduction

The taxa described here do not look like any of the known Neotropical Galleriinae. As they resemble Noctuidae, the specimens treated here were discovered, in the collections, mixed with unsorted material of this group.

## Material and methods

This review is based on 11 (5 g. s.) specimens in VOB and 3 in the CMNH. The holotypes of the new species are provisionally deposited in VOB, and will be transferred, together with the collection, to a Brazilian institution in the future. Some paratypes will be deposited in the USNM. Genitalia were prepared following the methods described by ROBINSON (1976). Terms for morphological characters follow HODGES (1971).

## Abbreviations

CMNH Carnegie Museum of Natural History, Pittsburgh, USA

FW forewing

g. s. genitalia slide

HW hind wing  
 TS Type species  
 VOB Vitor O. Becker Collection, Serra Bonita Reserve, Camacan, Bahia, Brazil.

**Results and discussion**

The characters of abdomen and male genitalia indicates that the two species described here belong to an undescribed genus of Pyralidae, Galleriinae.

***Atrigalleria* Becker, gen. n.**  
 TS: *Atrigalleria chlorographa* Becker, sp. n.

Diagnosis: The black colour with green lines on the forewings is unique among the taxa in the subfamily.

Description: Body black. Proboscis and ocelli absent; labial palpi slightly longer than maxillary palpi in males, porrect, twice as long in females; antenna laminate. FW Cu1 before end of cell, M2-M3 connected at lower angle of cell; M1-Rs connected at the upper angle of cell. HW female frenulum with two bristles. Abdomen: tympanum closed medially, praecinctorium absent. Male genitalia: uncus long, tapering distad, with sparse, short setae dorsally; gnathos absent; sac below anal tube present; juxta large, with two lateral arms extendig distad to base of uncus; valva short, broad; phallus long, thin, slightly curved dorsad.

Distribution: Known from the Andes, north to Costa Rica, at mid elevations.

Etymology: From the Latin *ater, atra, atrum* = black, and *Galleria* a genus name; feminine.

Remarks: The tympanum closed medially, venulae well developed, and the praecinctorium absent indicates that this genus belongs to the Galleriinae or the Chrysauginae, as defined by SOLIS (1992) and MUNROE & SOLIS (1999: 240). The genitalia lacking a gnathos and presenting a sac between transtilla and the anal tube, combined with the absence of ocellus, places it in the Galleriinae, Tirathabini (WHALLEY, 1964: 570). The only character which is not congruent with Galleriinae is the female frenulum with two bristles. Most Galleriinae and Chrysauginae females have three bristles, but there are exceptions, e. g. *Michaelshaffera* Solis, 1998 (SOLIS, 1992: 81).

**Key to species**

- FW with black area, between middle green line and postmedial band, not crossed by green line ....  
 .....*chlorographa*
- FW with black area, between middle green line and postmedial band, crossed by a green line that starts at the basal third of costa, crosses the green median line, connecting to the potmedial band before tornus .....*chlorogramma*

***Atrigalleria chlorographa* Becker, sp. n. (figs 1-3, 5, 6)**

Material examined: 11 ♂♂ (3 g. s.5652-5654) 2 ♀♀ (1 g. s. 5655). Holotype ♂, ECUADOR: Pichincha, San Miguel de los Baños, Milpe, 00°01'N - 78°51'W, 1170 m, 1-30-I-2015 (Thöny) (VOB); paratypes: 5 ♂♂, same data as holotype; 1 ♂, 1 ♀, Esmeraldas, Alto Tambo, 00°53'N - 78°31'W, 780 m, 1-30-I-2015 (Thöny); 3 ♂♂, Esmeraldas, Rio Cristal, Cotacachi-Cayapas Reserve, 1350 m, 20-VIII-1996 (Hillman) (CMNH); COSTA RICA: 1 ♂, Guanacaste, Estación Pitilla, 9 km S. Sta. Cecilia, 7700 m, 24-VIII-11-IX-1992 (Rios); 1 ♀, San José, Parque Nacional Braulio Carrillo, Estación Carrillo, 700 m, VII-1984 (Chacón) (VOB).

Diagnosis: Black. FW marked with green lines. Black area, distad of median line not interrupted.

Description: Male (fig. 2) FW length 12-15 mm (wingspan 28-34 mm), female (fig. 3) FW length 30 mm (wingspan 64 mm). Palpi black, greenish at tip; frons green, antenna pale yellow. Thorax black;

posterior margin of patagia, tegula and posterior margin of thorax green; legs black, tarsi greenish. FW black, crossed with green lines: basal band oblique, from base of costa, connecting to antemedial band at basal third of dorsum; antemedial band from basal third of costa connecting to an elongate blotch on cell, down to dorsum, connecting with basal band; medial line wide, from distal third of costa, connecting to median line on cell, forming an elongate blotch with a black dot in the middle; postmedial band, from before termen, oblique to near termen on M2, then a zigzag along termen to tornus; termen green; cilia spotted black. HW black. Abdomen black, a green band along middle ventrally. Male genitalia (fig. 5): uncus long, thin, tapering distad; sparse, short setae dorsally; gnathos absent, sac below anal tube present; valva short, broad, margins nearly parallel, narrowing slightly towards half; distal margin oblique to round apex; juxta large; two long lateral arms reaching base of uncus; phallus (fig. 6) long, thin, curved dorsad.

Distribution (fig. 1): Ecuador, Costa Rica, at mid to high elevations.



Fig 1.- *Atrigalleria* Becker, gen. n., distribution.

Etymology: From the Greek χλωρός [chloros] = green, and γραφικό [grapho] = write.

Remarks: Similar to *A. chlorogramma*, but smaller, and with the extension of the green line not crossing the black area distad of the median line, and male genitalia with valva longer and narrower.

***Atrigalleria chlorogramma* Becker, sp. n.** (figs 1, 4, 7, 8)

Material examined: Holotype ♂, ECUADOR: Esmeraldas, Alto Tambo, 00°53'N - 78°31'W, 780 m, 1-30-I-2015, g. s. 5656 (Thöny) (VOB).

Diagnosis: Black. FW marked with green lines. Black area, distad of median line crossed by a green line that starts from basal third of costa connecting with the postmedial band near tornus.

Description: Male (fig. 4) 18 mm (wingspan 40 mm). Very similar to the former, except for the black area distad of median line, crossed by a line. Male genitalia (fig. 7): uncus tapering distad; valva short, less than twice as long, margins parallel; distal margin oblique from middle towards apex; phallus (fig. 8), long, thin, bent dorsal.

Distribution (fig. 1): Ecuador, known from the type locality only.

Etymology: From the Greek *χλωρός* [chloros] = green, and *γραμμέ* [gramme] = line.

Remarks: Similar to *A. chlorographa*, but larger, and with the extension of the green line, that starts at basal third of costa, crossing the black area distad of the median line; male genitalia with valva shorter and broader than those of *A. chlorographa*.

## Acknowledgements

Hubert Thöny, Camacã, Bahia, Brazil, presented most of the specimens studied; Paulo Nunes, Serra Bonira Reserve, Camacan, Bahia, Brazil, prepared the illustrations; Bernard Landry, Museum d'Histoire Naturelle, Geneva, Switzerland, reviewed the manuscript, made several corrections and suggested some changes that improved the article.

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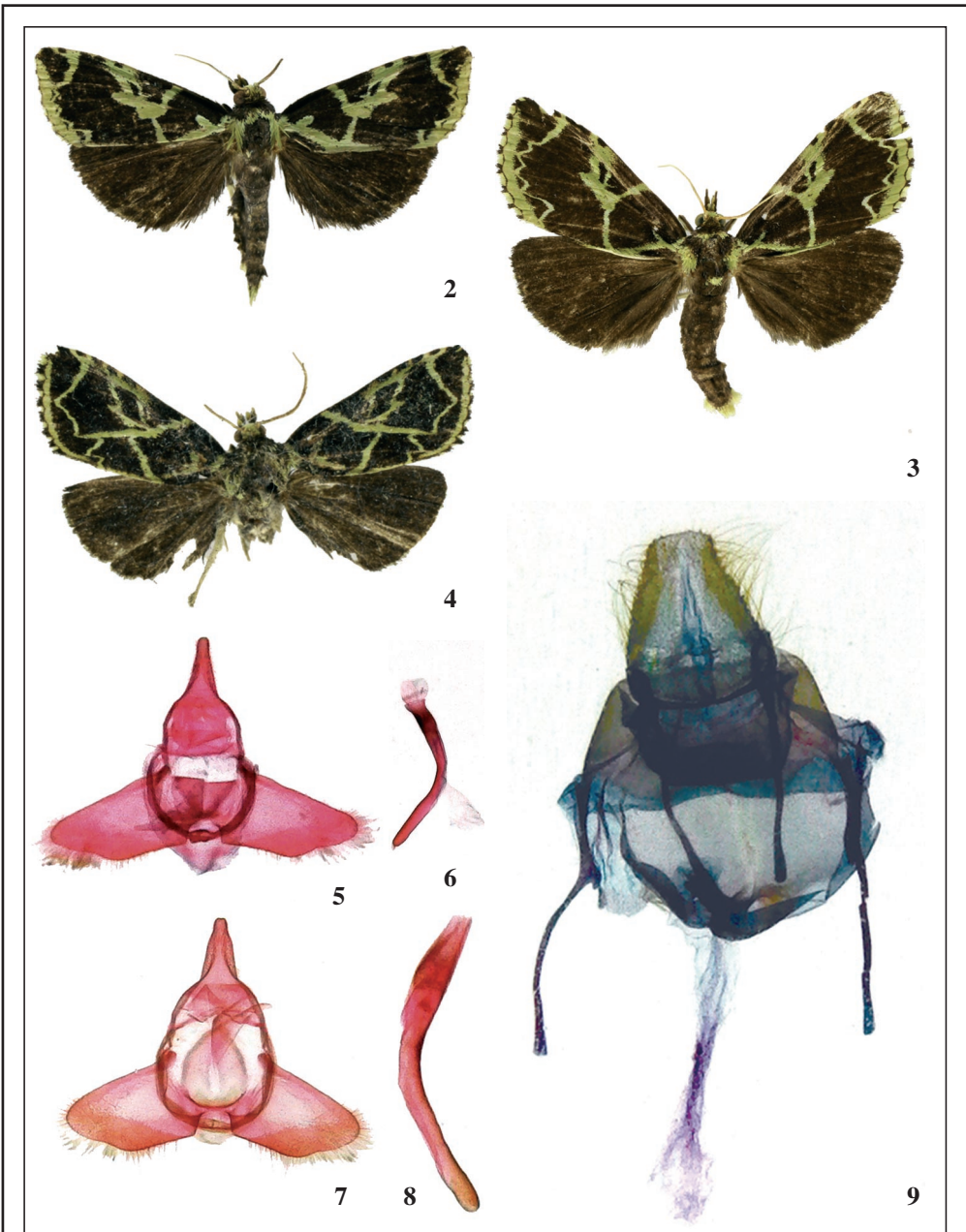
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(Recibido para publicación / *Received for publication* 5-III-2021)

(Revisado y aceptado / *Revised and accepted* 21-IV-2021)

(Publicado / *Published* 30-III-2022)

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**Figs 2-9.**— 2-4. Adults, dorsal view, Ecuador. 2. *Atrigalleria chlorographa* Becker, sp. n., male holotype. 3. *A. chlorographa* Becker, sp. n., female paratype. 4. *A. chlorogramma* Becker, sp. n., male holotype. 5-9. Male genitalia, ventral view, phallus, lateral view, Ecuador. 5-6. *A. chlorographa* Becker, sp. n., male paratype. 7-8. *A. chlorogramma* Becker, sp. n., male holotype. 9. *A. chlorographa* Becker, sp. n., female paratype.