

# A new species of *Rhuda* Walker, 1857 from Colombia (Lepidoptera: Notodontidae, Heterocampinae)

Efraín R. Henao, Rodrigo Bernal & Blanca Martínez

## Abstract

The new species *Rhuda guayuyaco* Henao, Bernal & Martínez, sp. nov. from the Andean-Amazonian piedmont of Colombia, is described and illustrated. The new species differs in the FW being pale pinkish brown, the dark area pale brown, with smooth margins, its distal margin perpendicular to the costa. It superficially resembles the Brazilian *R. procas* (Druce, 1894), from which it differs in the irregular band beyond the two subterminal lines near the tornus being a pale, thin irregular line, instead of a dark band. The male genitalia differ from those of other species in the size of the valve, the shape of the uncus and the shape and size of the aedeagus.

**Keywords:** Lepidoptera, Notodontidae, Heterocampinae, Amazonia, new species, *Rhuda*, Colombia.

## Una nueva especie de *Rhuda* Walker, 1857 de Colombia (Lepidoptera: Notodontidae, Heterocampinae)

## Resumen

Se describe e ilustra la nueva especie *Rhuda guayuyaco* Henao, Bernal & Martínez, sp. nov. del piedemonte andino-amazónico de Colombia. La nueva especie difiere en que el FW es marrón rosado pálido, la zona oscura marrón pálido, con márgenes lisos, su margen distal perpendicular a la costa. Se parece superficialmente a la brasileña *R. procas* (Druce, 1894), de la que difiere en que la banda irregular más allá de las dos líneas subterminales cerca del tornus es una línea irregular pálida y fina, en lugar de una banda oscura. Los genitales masculinos difieren de los de otras especies en el tamaño de la valva, la forma del uncus y la forma y tamaño del aedeagus.

**Palabras clave:** Lepidoptera, Notodontidae, Heterocampinae, Amazonia, nueva especie, *Rhuda*, Colombia.

## Introduction

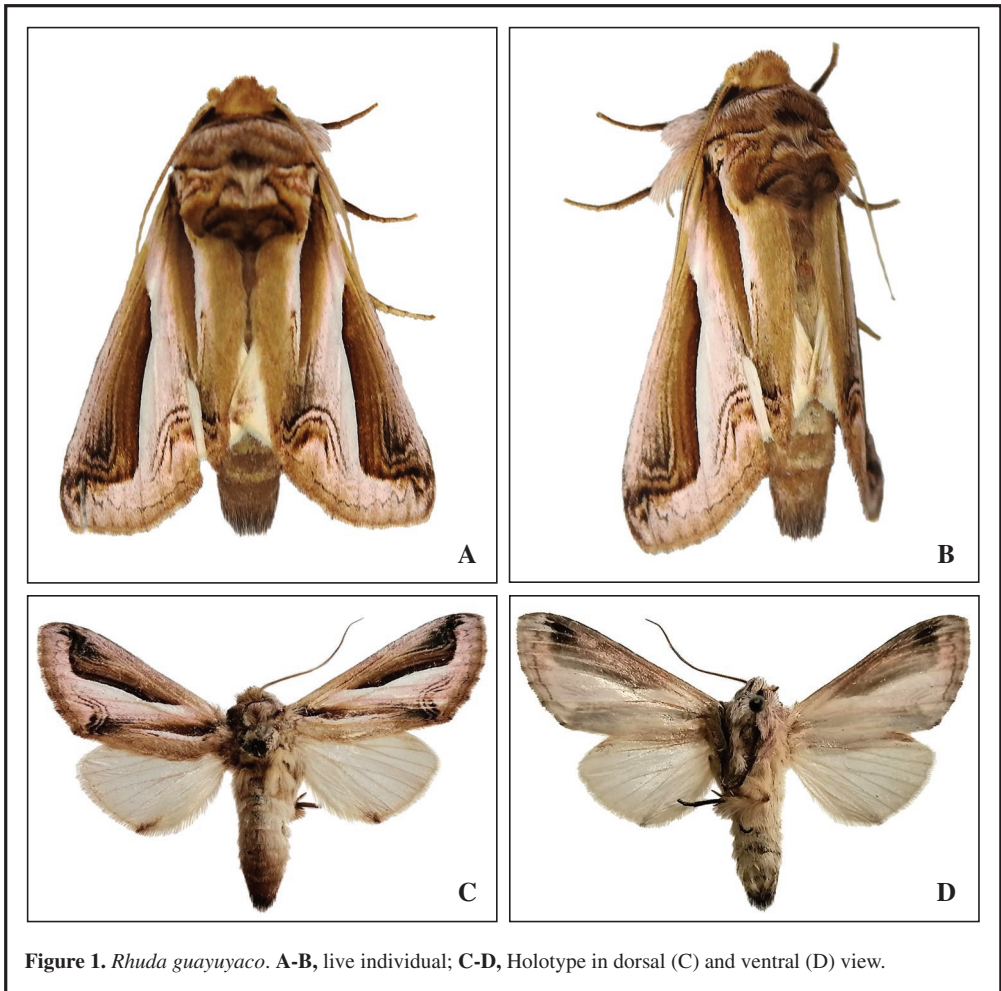
The family Notodontidae is known in Colombia from 515 species, 31% of them recorded for the first time in the country as late as past year (Bernal & Martínez, 2023; Prada-Lara et al. 2023). The high number of recent new records gives an idea of the poor knowledge of the family in that country.

The genus *Rhuda* Walker, 1857 is one of the most characteristic among the Notodontidae, the dark area below the costa being unique in the family. The genus comprises 14 species (Becker, 2021), three of which have been recorded in Colombia (Prada-Lara et al. 2023).

While documenting moths in the Estación Agroforestal Guayuyaco, in the Andean-Amazonian piedmont of the Cauca Department, in Colombia, two species appeared as relatively common on the light screen –*Rhuda focula* (Stoll, [1782]), and a species superficially resembling the Brazilian *Rhuda procas* (Druce, 1894) in overall appearance but differing from that species in several wing pattern details and in genitalia. The species is here described as new.

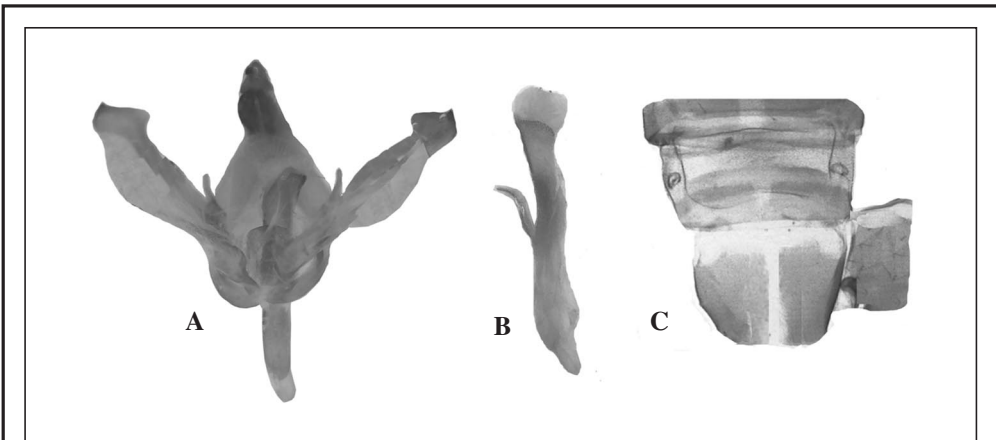
*Rhuda guayuyaco* Henao, Bernal & Martínez, sp. nov. (Figures 1, 2)

Holotype: Male with the following label: / Holotypus / 18-VIII-2023, Colombia, Centro de Capacitacion Agroforestal Guayuyaco, Colombia, Piamonte, Cauca, Miraflores, 1.020637° N, 76.444731° W, 295 m. EH-19745 deposited in the Museum Center, Natural History Museum, University of Caldas (MHN-UC). An adult male captured by Efraín Henao at a screen with white and UV light. Bernal, Martínez & Henao det. 2023



**Figure 1.** *Rhuda guayuyaco*. A-B, live individual; C-D, Holotype in dorsal (C) and ventral (D) view.

Description Male: FW 16.8 mm; wingspan 40 mm. Head and thorax pinkish brown, with blackish bands both in front and at the vertices; antenna with a long thin dark orange flagellum with 13 visible cilia; outer margin of tegula blackish; anterior tibia brown, middle and posterior tibia silver. Abdomen brown. Male genitalia (figure 2A) with uncus short and thick; valve large, broad, and flattened, sclerotized towards the upper edge, wide subtriangular, simple costa narrow and uniform, the rest weakly sclerotized. Aedeagus (figure 2B) thick, semi-erect, cylindrical; vesica globose and with two small cornuti. Distal margin of eighth sternite slightly concave (figure 2C).



**Figure 2.** *Rhuda guayuyaco* **A**, genitalia, ventral view; **B**, aedeagus, lateral view; **C**, 8th sternite.

**Diagnosis:** FW with inner margin of dark area smooth, the distal margin almost perpendicular to costa; HW white, with a thin, submarginal brown line and an elongated, brown patch at tornus. Male genitalia with the tegumen simple and straight, uncus short and blunt; valve broad, large, and flattened; saccus short and round; vinculum a little sinuous; aedeagus long, thick, and well sclerotized, with multiple small cornuti and broad vesica.

**Etymology:** The specific epithet *guayuyaco* is the name of a river that runs from the eastern slopes of the Andes, passes close to the Guayuyaco Agroforestry Station, and flows into the upper Caquetá (Japurá) River. Guayuyaco is a name in Inga, a language of the Quechua family, with the element *-yaco* meaning river; the root *wayu* does not occur in Inga, but it means edible fruit in Quechua. The name is used here as a noun in apposition, and it is therefore indeclinable.

**Ecological notes:** During three successive nights, several individuals of *Rhuda guayuyaco* visited the white screens with white and UV lights at the Guayuyaco Agroforestry Station, together with *Rhuda focula*. During one night of sampling at the Kawarí Lookout, by the Fragua River, 22.6 km northeast of the Station, only *R. focula* was seen, among the ca. 400 species that visited our screen.

**Discussion:** *Rhuda guayuyaco* differs from other species in the genus in the FW being pale pinkish brown, the dark area pale brown, with smooth margins, its distal margin perpendicular to the costa. It superficially resembles the Brazilian *R. procas*, particularly in the distal margin of the dark coastal area being perpendicular to the costa. However, this species differs from *R. guayuyaco* in the irregular band beyond the two subterminal lines near the tornus being a thick, dark band, instead of a thin irregular line (see Draudt 1932, pl. 151i; Becker 2021, figs. 21-23). The genitalia of both species differ in the valve, which in *R. procas* is larger and broader than in *R. guayuyaco*; the distal portion of the valve has very different shapes, thin and fine in *R. procas* and broad and pointed in *R. guayuyaco*. The aedeagus is thinner and finer in *R. procas* while it is thick and robust in *R. guayuyaco*. The 8th abdominal sternite is concave in *R. guayuyaco*, like that of *R. diffusa*. *R. procas* is native to southeastern and central Brazil, its closest known locality being ca. 3600 km from the type locality of *R. guayuyaco*.

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