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Trichura dixanthia (Hampson, 1898) first records from Colombia and Venezuela, South America, with notes on collecting and geographic distribution (Lepidoptera: Erebidae, Arctiinae)

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Abstract

This work provides the first records of *Trichura dixanthia* (Hampson, 1898) from Colombia and Venezuela, South America. Brief notes on collecting and the geographical distribution of the species is updated.
KEY WORDS: Lepidoptera, Erebidae, Arctiinae, biodiversity, wasp moths, Brazil, Colombia, Venezuela.

Trichura dixanthia **(Hampson, 1898) primer registro para Colombia y Venezuela, Sudamérica, con notas sobre su colecta y distribución geográfica (Lepidoptera: Erebidae, Arctiinae)**

Resumen

En este trabajo presentamos los primeros reportes de *Trichura dixanthia* (Hampson, 1898) en Colombia y Venezuela, Sudamérica. Se incluyen notas breves sobre colecta y se actualiza su distribución geográfica.
PALABRAS CLAVE: Lepidoptera, Erebidae, Arctiinae, biodiversidad, polillas avispa, Brasil, Colombia, Venezuela.

Introduction

Wasp-moths belonging to Ctenuchina (Erebidae: Arctiinae) are Neotropical in distribution. The group includes several nocturnal moths as well as many daylight flyers, which are sometimes captured at lights (HERNÁNDEZ-BAZ *et al*., 2014). Their resemblance to wasps allows for an easy recognition of the group (HERNÁNDEZ-BAZ, 2012). However, many species appear to be uncommon in nature, some have restricted geographical ranges and they are also infrequently collected, being rare in entomological collections (HERNÁNDEZ-BAZ *et al*., 2013).

A total of 110 wasp moths (Ctenuchina and Euchromiina) have been recorded from Colombia, as well as 130 from Venezuela within the database "Polilla" (HERNÁNDEZ-BAZ, 2012). Such a small number of recorded specimens/species should be considered unusual since both countries are known to be among the most biologically diverse in the world (DUARTE & VELHO, 2008; RODRÍGUEZ & ROJAS-SUÁREZ, 2008).

The genus *Trichura* Hübner, [1827], is very characteristic and easy to recognize because the entire group of species exhibit a tail-like appendage frequently called "hair" which is densely covered with scales (Fig. 1). Seventeen species are known from the Americas (DRAUDT, 1916), but only two have been previously recorded from Colombia [*Trichura esmeralda* (Walker, 1854) and *T. latifascia* (Walker

1854)] and from Venezuela [*T. esmeralda* and *T. cerberus* (Pallas, 1772)] within the data base "Polilla," based on the revision of several collections from both countries and worldwide (HERNÁNDEZ-BAZ, 2012). A third Colombian species, *Trichura viridis* was described based on two specimens (1 ♂, 1 ♀) and supposedly collected in Bogotá (GAEDE, 1926). *Trichura cerberus*, known also from Trinidad, *T. druryi* Hübner, [1819], and *T. esmeralda* have been also registered from Venezuela by a few authors (BEEBE & FLEMMING, 1951; HAMPSON, 1898; OSUNA, 2000; SANDOVAL et al., 2008). After examining the works of HAMPSON (1898), DRUCE (1898), and DRAUDT (1916), contacting some Lepidoptera researchers and Museums from Colombia and Venezuela, and comparing the specimens to material from several worldwide collections and photographs of type specimens, we can conclude that as far as we know, *T. dixanthia* (Hampson, 1898) (Fig. 1) is a new record for both countries, considerably enhancing the known geographic distribution of the species (Fig. 2).

Material examined

Trichura dixanthia (Hampson, 1898) (Fig. 1): 1 ♂, Colombia, Antioquia, Municipio San Jerónimo, Vereda Loma Hermosa, Granja J. J. González, 648 m, 20-XI-2010, Politécnico Colombiano "Jaime Isaza Cadavid", Col. F. Hernández-Baz, Collecting time: 10:00 hours, day-flight, N 9º 26' 58.51", W 75º 44' 24.64"; unknown sex, Colombia, Valle del Cauca, Cali, 1000 msnm, Abril 2011, Col. Vaclv Pacl (from photograph); 1 ♂, Venezuela, Barinitas, Barinas, 900 m, X-1988, al Rabo de Alacrán, Colls. F. Romero R. & F. Romero M., colección Familia Romero.

Comments on biology, behavior and distribution

This species was thought to be distributed in Southern Brazil, based on specimens collected in Minas Gerais (HAMPSON, 1898) and São Paulo (DRAUDT, 1918). The larvae of the species are unknown, and nothing is known on its life history. Adults have been located flying and perching on leaves inside the forest in the shade of trees in the undergrowth area. The examined specimen from Colombia (Fig. 1) was collected at 10:00 h on a sunny day. It was flying fast in a circular fashion for about 10 minutes before resting for some 30 seconds on a leaf on top of a bush. After this short rest, it repeated the cycle by flying for 10 more minutes, to rest again. Collectors from Venezuela and Colombia have known that species in the genus *Trichura* (*T. esmeralda*, *T. cerberus* & *T. dixanthia*) are frequently attracted to "rabo de alacrán" (heliotrope; *Heliotropium* spp.: Boraginaceae) (Fig. 4), just as happens with Ithomiini (Nymphalidae: Danainae). It is quite common to see 2 or 3 of these wasp-moths feeding on the bait, they arrive either early in the morning or late in the afternoon. Curiously enough, other wasp-moths from this and similar genera within the family might arrive in larger numbers if it is slightly raining or foggy.

One of the studied specimens from Colombia is held at the entomological collection "Museo Francisco Luis Gallego", Universidad Nacional de Colombia, Medellin, while the second one was photographed by J. Salazar and is part of the personal insect collection of Mr. Vaclv Pacl from Cali. The studied Venezuelan specimen is deposited at the Romero Family Collection, Maracay. This latter specimen was collected feeding on a *Heliotropium* spp. plant used as bait. *Trichura* spp. is easily recognized while flying since they do so in a "wasp-like" fashion making small circles until finally resting on a plant.

Even though they are easily recognized, *Trichura dixanthia*, as well as other species in the genus are frequently overlooked by collectors, making them uncommon in collections worldwide. After revising several collections from Colombia and Venezuela, only a few specimens have been found from both countries. However, these new records clearly suggest that the species is distributed in a wider area in South America than originally thought (Fig. 2).

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Salazar who provided us with the photograph and collecting details of a specimen in the Vacl Pacl collection. Thanks also to Gregory Nielsen, Colombia, for the picture of insects attracted to *Heliotropium* (Fig. 3). We are deeply indebted to Andrew Neild, Mauro Costa and María Conchita Romero who helped us with information, photographs and communication regarding the Venezuelan specimens in the Romero Family's Collection.

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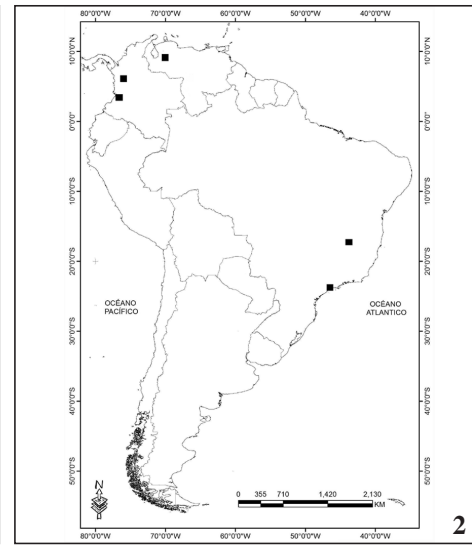

Figures 1-3.– 1. *Trichura dixanthia* (Hampson 1898), 1 ♂, Deposited at the Entomology Collection of Politécnico Colombiano Jaime Isaza Cadavid, Municipio San Jerónimo, Departamento de Antioquia, Colombia. (Picture: F. Hernández-Baz). **2.** Known distribution of *Trichura dixanthia* (Hampson 1898) in South America. **3.** Specimens of Ithomiini (Nymphalidae: Danainae) [*Hypoleria ocalea* (Doubleday & Hewitson, 1847) -left, bottom- and *Hypothyris fluonia* Hewitson, 1854 - center, left], *Agyrta dux* (Walker, 1854) (Arctiidae) (bottom, right) and *Trichura dixanthia* (Hampson, 1898) (top, left) are seen sucking on dry flowers of a *Heliotropium* sp. (Boraginaceae) plant used as bait. Villavicencio, Meta, Colombia (Picture: Gregory Nielsen).