



# A cybercatalogue of American sand fly types (Diptera, Psychodidae, Phlebotominae) deposited at the Natural History Museum, London

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## Abstract

## Background

Sand flies (Diptera, Psychodidae, Phlebotominae) are biting flies involved in the transmission of pathogens, including the protozoan parasite *Leishmania* amongst human and non-human animals (Rangel and Lainson 2009).

## New information

A total of 60 species of American Phlebotominae (Diptera: Psychodidae), distributed amongst 16 genera were studied. A checklist of the primary and secondary type specimens held at the Natural History Museum, London (NHMUK), is given and 968 photographs of the specimens and their labels are made available on a [Scratchpads](http://phlebotominaenhmtypes.myspecies.info) website <http://phlebotominaenhmtypes.myspecies.info>.

## Keywords

Taxonomy, Sand fly, Neotropical, Nearctic, Phlebotominae, type catalogue, NHMUK

## Introduction

There are approximately 1,000 valid described species of sand flies in the world, of which 530 are known to occur in the Americas (Shimabukuro et al. 2017).

The aim of this work is to provide a checklist of Phlebotominae types of the Neotropical and Nearctic regions held in the collections of the Natural History Museum, London (NHMUK formerly BMNH), together with electronic links to, scans of whole slides, plus detail images of the taxonomically informative morphological structures. This work updates the American portion of the 1990 checklist of types deposited at the NHMUK (Townsend and Lane 1990).

## History

Owing to the small size and morphological homogeneity of phlebotomine sand flies, few species were described before the turn of the 20<sup>th</sup> century. Indeed little progress in their taxonomy was made until Adler and Theodor (1926) and Theodor (1932) drew attention to the utility of various internal structures (cibarium & spermathecae) for species differentiation. Currently, taxonomically valid species descriptions of phlebotomine sand flies still rely on adult morphology. Although newer molecular techniques are increasingly used for identifying species (Zapata et al. 2012), they have yet to be formally used as characters in species descriptions. Type specimens are confined to the adult stage, with few taxa described in the immature stages.

Significant donations to the NHMUK collection have come from: (i) Graham Bell Fairchild who worked on the Panamanian fauna in the 1950s and 60s; (ii) a number of early types described by Robert Newstead in the 1920s when he was a Professor at the Liverpool School of Tropical Medicine; (iii) and most significantly, the collection of Oskar Theodor, which the museum purchased in 1981 after his retirement from the University of Jerusalem. The NHMUK has also absorbed the specimen collections of the London School of Tropical Medicine and Hygiene (LSHTM).

The main body of the NHMUK Phlebotominae collection was assembled by Dr D.J. Lewis who, though not a member of staff, was based at the museum for 30 years (1956-1986) whilst in the employ of the Medical Research Council in London. All his material was mounted in Berlese media which is not a permanent mountant. There are many examples of deteriorating Lewis slides in the NHMUK collection (Fig. 1), as well as instances where Lewis remounted other authors' type specimens into Berlese. His distinctive handwriting and messy slides, often bearing multiple specimens, are instantly recognisable.

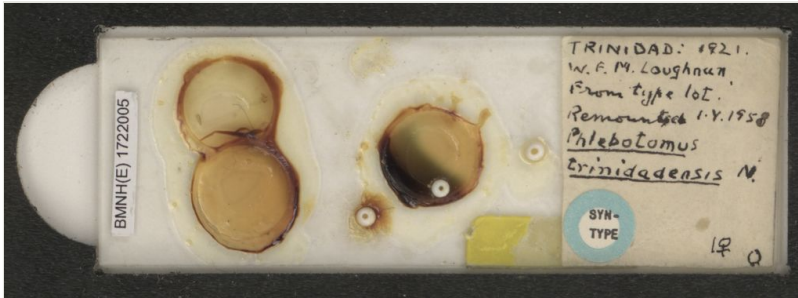


Figure 1. [doi](#)

Example of an R. Newstead type remounted into Berlese by D. J. Lewis, showing the typical darkening of the mountant as it deteriorates.

## Taxonomic treatment

Phlebotominae taxonomy has a long history of differences in opinion amongst experts and various conflicting classification schemes. The current situation is no exception, with both classification of Young and Duncan (1994), which is based on the previous work of Lewis et al. (1977) and that of Galati (2003b) in use at the same time, for the New World fauna. For a comparison of how these two classifications relate to each other see Fig. 2.

Currently, the NHMUK collections are arranged according to Young and Duncan (1994), but we have used the Galati (2003b) naming systems here to reflect the current knowledge of the group.

In their guide to identification and distribution, Young and Duncan (1994) adopt the classification of Lewis et al. (1977) with only minor changes. They make it clear that their arrangement of taxa does not represent a phylogenetic analysis of the group and, aside from a few comments in the notes, give no information on the relationships between their subgeneric groups. It is clear that their groupings have been arrived at through a phenetic review of morphological characters with little focus on identifying any common ancestry between groups.

Lewis et al. (1977) proposed their classification at a time when those working on sand flies were faced with the choice between two family names, several subfamily names and, for some species, three possible generic names. Their aim was to create a stable general framework with flexible subdivisions into which, recent and future ideas on the evolutionary relationships within the group, could be assimilated. They present a review of the early literature on the group and, with reference to the International Code of Zoological Nomenclature (ICZN), proposed the use of the family name Psychodidae Newman 1834 and the subfamily name Phlebotominae Rondani 1840, proposals that have been more or less universally accepted. Their proposal for the use of just five genera (*Brumptomyia*, *Lutzomyia*, *Phlebotomus*, *Sergentomyia* and *Warileya*) now seems less successful.

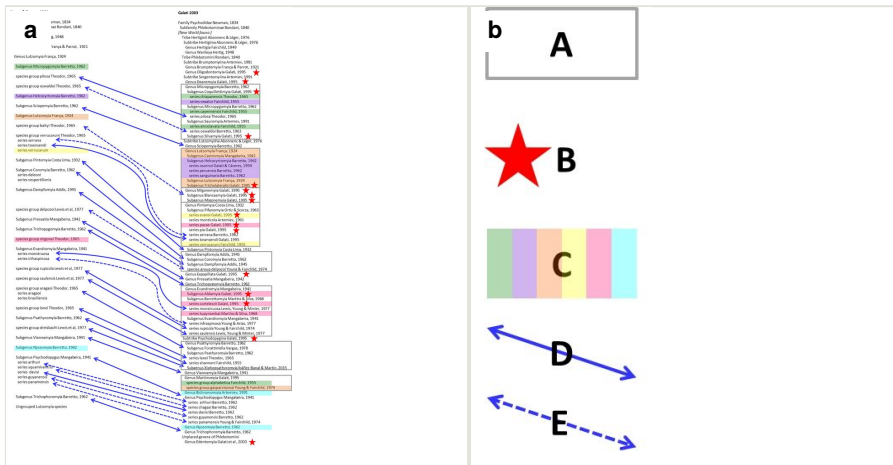


Figure 2.

Classifications of Phlebotominae proposed by Young and Duncan (1994) and Galati (2003b).

**a:** Comparison of the two classifications. [doi](#)

**b:** Explanation of the symbols used in Figure 2a. Grey boxes (**A**) on the Galati (2003b) classification indicate novel phylogenetic information provided by the classification of Galati. Aside from a few remarks given in the text, Young and Duncan (1994) give no information on the phylogenetic relationships between any of the sub-generic groups within their genus *Lutzomyia*. Red stars (**B**) indicate new sub-genera or genera in the Galati classification that do not exist in the Young and Duncan classification. Coloured highlighting (**C**) indicates groupings from Young and Duncan which are not recovered as monophyletic groups in the Galati classification. Solid blue arrows (**D**) indicate where exactly the same grouping is recovered in both classifications. Broken blue arrows (**E**) indicate where broadly the same grouping is recovered in both classifications with only very minor changes to the taxa included. [doi](#)

At that time, 1977, around 600 sand fly species had been described, with 290 of these in the American genus *Lutzomyia* (Young and Duncan 1994). The current checklist for American sand flies alone (Shimabukuro et al. 2017) stands at 530 and use of the Lewis et al. (1977) concept of the genus *Lutzomyia* would place 495 of these taxa into a single genus. It now seems likely that, by placing the emphasis on a stable and simple classification over one that best represented the evolutionary history of the group, Lewis et al. (1977) created a number of polyphyletic groups, particularly their genus *Lutzomyia*.

The classification of Galati (1995) and Galati (2003a) is more complex with the genus *Lutzomyia*, as defined in Lewis et al. (1977) and Young and Duncan (1994), split into 23 genera and 22 sub-generic groupings and has been increasingly utilised by authors working on the American fauna.

The study by Galati (1995) represented the first comprehensive attempt to perform a phylogenetic analysis of the American Phlebotominae, comprising a cladistic analysis of 88 adult morphology characters, using the Psychodidae subfamily Bruchomyiinae as the principal outgroup. The classification has since been updated and represents our current

best understanding of the evolutionary relationships within this important group (Galati 2003a, Galati 2003b).

There are some nomenclatural issues with the Galati classification as it stands at the present moment (see Shimabukuro et al. 2017). Within the classification a number of family group and genus group names are attributed to Artemiev from his 1991 work (Artemiev 1991). In this work, Artemiev does not accompany any of his new names with a description that states in words characters that are purported to differentiate the taxa, thus all his new names do not comply with ICZN Article 13.1.1 <http://www.iczn.org/iczn/index.jsp> and should be considered *nomina nuda*. Likewise, there are a large number of family group and genus group names in the classification attributed to Galati (1995), where she also fails to accompany any of her new names with a description that can be used to distinguish them. Galati lists the characters used, gives a polarised transformation series and maps the characters and taxa on to a cladogram, but this is not sufficient under the code to render the new names from her 1995 work available. In 2003, Galati updated her 1995 classification (Galati 2003b, Galati 2003a), this 2003 work contains extensive identification keys for all groups and any unavailable names should take authorship and date from this later act of establishment under ICZN articles 50 and 21.

## Materials and methods

### Checklist

The list contains information compiled from the examination of Nearctic and Neotropical species of sand flies from the Diptera Collection at the NHMUK.

Species are listed alphabetically, with genus and subgenus designations according to Shimabukuro et al. 2017. Links to the scratchpad entry and images for each specimen are given in the **eventRemarks** section of the checklist.

Readers familiar with the classification of Young and Duncan (1994) should refer to the scratchpads website <http://phlebotominaenhmtypes.myspecies.info> where the specimens have been arranged according to both classifications.

We have excluded from this catalogue two NHMUK specimens bearing “type” labels, for which we can find no record of the given species name in the literature. One labelled as the holotype of *Lutzomyia witremundoi* (author Feliciangeli), the other labelled as a paratype of *L. patiñoi* (authors Mangabeira & Galindo). It seems probable that these are unpublished manuscript names and are therefore unavailable under article 8 of the ICZN.

### Specimen Images

Photographs were taken in the Sackler Biodiversity Imaging Laboratory (SBIL), at the NHMUK, with an Olympus BX63-CBH microscope equipped with a DP73 camera and

differential interference contrast (DIC) illumination. The images were edited in the Cellsens software and stacked images were produced by HeliconFocus 6 software.

Whole slide scans were generated using a SatScan instrument at x5 magnification and images were cropped and processed using the Inselect software, version 0.1.35, available from the Natural History Museum <https://naturalhistorymuseum.github.io/inselect>.

## Data resources

### Bibliography

Most of the original species descriptions are still under copyright to their original publisher. The bibliographical and historical database of scientific articles on leishmaniasis and sand flies hosted by the Laboratoire de Parasitologie at the University of Montpellier is an extremely useful resource <http://www.leishpub.univ-montp1.fr>.

### Specimen Images

The specimen images are available on the NHMUK data portal: <https://doi.org/10.5519/0051226>.

The checklist, specimen data and specimen images are available on a Scratchpads website <http://phlebotominaenhmtypes.myspecies.info>.

## Checklist

### *acanthobasis* Fairchild & Hertig, 1952

#### Nomenclature:

*Phlebotomus acanthobasis* Fairchild & Hertig, 1952 (Fairchild and Hertig 1952)

#### Materials

#### Paratypes:

- a. scientificName: *Pressatia acanthobasis* (Fairchild & Hertig, 1952); acceptedNameUsage: *Pressatia camposi* (Rodríguez, 1950); country: Panama; stateProvince: Colón; locality: Mojinga swamp; eventDate: 09-05-51; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/192>; sex: Female; catalogNumber: BMNHE1722073; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Pressatia acanthobasis* (Fairchild & Hertig, 1952); acceptedNameUsage: *Pressatia camposi* (Rodríguez, 1950); country: Panama; stateProvince: Panamá; locality: Río Majé, Charco el Toro; eventDate: 03-22-50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/193>; sex: Male; catalogNumber: BMNHE1722074; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Colombia, Costa Rica, Ecuador, Nicaragua, Panama

**Notes:** Synonym of *Pressatia camposi* (Rodríguez, 1950) Rodríguez 1950. Synonymised by Fairchild and Hertig 1958b.

### ***aclydifera* Fairchild & Hertig, 1952**

#### **Nomenclature:**

*Phlebotomus aclydiferus* Fairchild & Hertig, 1952 (Fairchild and Hertig 1952)

#### **Materials**

##### *Paratypes:*

- a. scientificName: *Psathyromyia (Xiphopsathyromyia) aclydifera* (Fairchild & Hertig, 1952); country: Panama; stateProvince: Colón; locality: Mojinga swamp, nr. Gatún; eventDate: 08-21-51; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/111>; sex: Female; catalogNumber: BMNHE1721992; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Psathyromyia (Xiphopsathyromyia) aclydifera* (Fairchild & Hertig, 1952); country: Panama; stateProvince: Chiriquí; municipality: Barú; locality: Puerto Armuelles; eventDate: 06-09-51; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/112>; sex: Male; catalogNumber: BMNHE1721993; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Belize, Bolivia, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama

**Notes:** Valid species in *Psathyromyia (Xiphopsathyromyia)*.

### ***anduzei* Rozeboom, 1942**

#### **Nomenclature:**

*Phlebotomus anduzei* Rozeboom, 1942 (Rozeboom 1942)

#### **Materials**

##### *Syntypes:*

- a. scientificName: *Nyssomyia anduzei* (Rozeboom, 1942); country: Venezuela; stateProvince: Bolívar; municipality: Gran Sabana; locality: Gran Sabana; year: 1941; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/187>; sex: Female; catalogNumber: BMNHE1722068; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Nyssomyia anduzei* (Rozeboom, 1942); country: Venezuela; stateProvince: Bolívar; municipality: Gran Sobana; locality: Gran Sobana; year: 1941; month: 12; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/239>; catalogNumber: BMNHE1722120; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Nyssomyia anduzei* (Rozeboom, 1942); country: Venezuela; stateProvince: Bolívar; municipality: Gran Sobana; locality: Gran Sobana; year: 1941; month: 12; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/240>; sex:

Female; catalogNumber: BMNHE1722121; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

- d. scientificName: *Nyssomyia anduzei* (Rozeboom, 1942); country: Venezuela; stateProvince: Bolívar; municipality: Gran Sobana; locality: Gran Sobana; year: 1941; month: 12; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/241>; sex: Female; catalogNumber: BMNHE1722122; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- e. scientificName: *Nyssomyia anduzei* (Rozeboom, 1942); country: Venezuela; stateProvince: Bolívar; municipality: Gran Sobana; locality: Gran Sobana; year: 1941; month: 12; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/242>; catalogNumber: BMNHE1722123; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Brazil, Costa Rica, French Guiana, Panama, Peru, Venezuela

**Notes:** Valid species in *Nyssomyia*.

### ***aulari* Feliciangeli, Ordoñez & Manzanilla, 1984**

#### **Nomenclature:**

*Lutzomyia aulari* Feliciangeli, Ordoñez & Manzanilla, 1984 (Feliciangeli et al. 1984b)

#### **Material**

##### *Holotype:*

- a. scientificName: *Pintomyia (Pifanomyia) aulari* (Feliciangeli, Ordoñez & Manzanilla, 1984); country: Venezuela; stateProvince: Trujillo; locality: Loma Abajo; eventDate: 06-01-70; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/207>; sex: Male; catalogNumber: BMNHE1722088; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Venezuela

**Notes:** Valid species in *Pintomyia (Pifanomyia)*.

### ***auraensis* Mangabeira, 1942**

#### **Nomenclature:**

*Flebotomus auraensis* Mangabeira, 1942 (Mangabeira 1942)

#### **Material**

##### *Paratype:*

- a. scientificName: *Trichophoromyia auraensis* (Mangabeira, 1942); country: Brazil; stateProvince: Pará; municipality: Belém; locality: Aurá, em buraco de tatu.; year: 1940; month: 8; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/200>; sex: Male; catalogNumber: BMNHE1722081; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Bolivia, Brazil, Colombia, Peru, Surinam, Venezuela



**Notes:** Valid species in *Trichophoromyia*.

### ***bispinosus* Fairchild & Hertig, 1951**

#### **Nomenclature:**

*Phlebotomus bispinosus* Fairchild & Hertig, 1951 (Fairchild and Hertig 1951a)

#### **Materials**

##### *Paratype:*

- a. scientificName: *Psychodopygus bispinosus* (Fairchild & Hertig, 1951); country: Panama; stateProvince: Chiriquí; locality: La Victoria, Cerro Jefe; eventDate: 08-29-50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/97>; sex: Female; catalogNumber: BMNHE1251325; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

##### *Allotype:*

- a. scientificName: *Psychodopygus bispinosus* (Fairchild & Hertig, 1951); country: Panama; stateProvince: Chiriquí; locality: La Victoria, Cerro Jefe; eventDate: 08-30-50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/98>; sex: Male; catalogNumber: BMNHE1251326; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Belize, Brazil, Colombia, Costa Rica, Ecuador, French Guiana, Guatemala, Honduras, Mexico, Nicaragua, Panama, Surinam

**Notes:** Valid species in *Psychodopygus*.

### ***botella* Fairchild & Hertig, 1961**

#### **Nomenclature:**

*Phlebotomus botellus* Fairchild & Hertig, 1961 (Fairchild and Hertig 1961)

#### **Material**

##### *Paratype:*

- a. scientificName: *Lutzomyia (Helcocyrtomyia) botella* (Fairchild & Hertig, 1961); country: Panama; stateProvince: Chiriquí; locality: El Volcan; eventDate: 03-23-54; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/129>; sex: Female; catalogNumber: BMNHE1722010; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Panama

**Notes:** Valid species in *Lutzomyia (Helcocyrtomyia)*.

### ***brumpti* Larrousse, 1920**

#### **Nomenclature:**

*Phlebotomus brumpti* Larrousse, 1920 (Larrousse 1920)

## Materials

### Syntypes:

- a. scientificName: *Brumptomyia brumpti* (Larrousse, 1920); country: Brazil; locality: Albuquerque; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/130>; sex: Female; catalogNumber: BMNHE1722011; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Brumptomyia brumpti* (Larrousse, 1920); country: Brazil; locality: Albuquerque; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/162>; sex: Male; catalogNumber: BMNHE1722043; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Argentina, Bolivia, Brazil

**Notes:** Valid species in *Brumptomyia*.

## *cayennensis braci* Lewis, 1967

### Nomenclature:

*Lutzomyia cayennensis braci* Lewis, 1967 (Lewis 1967)

## Materials

### Holotype:

- a. scientificName: *Micropygomyia (Micropygomyia) cayennensis braci* (Lewis, 1967); country: Cayman Islands; stateProvince: Cayman Brac; locality: Bamboo Bay; eventDate: 12-18-64; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/147>; sex: Male; catalogNumber: BMNHE1722028; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

### Paratypes:

- a. scientificName: *Micropygomyia (Micropygomyia) cayennensis braci* (Lewis, 1967); country: Cayman Islands; stateProvince: Cayman Brac; locality: Bamboo Bay; eventDate: 18/12/64; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/169>; sex: Female; catalogNumber: BMNHE1722050; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Micropygomyia (Micropygomyia) cayennensis braci* (Lewis, 1967); country: Cayman Islands; stateProvince: Cayman Brac; locality: Bamboo Bay; eventDate: 18/12/64; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/170>; sex: Female; catalogNumber: BMNHE1722051; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Micropygomyia (Micropygomyia) cayennensis braci* (Lewis, 1967); country: Cayman Islands; stateProvince: Cayman Brac; locality: Stake Bay; eventDate: 12-16-64; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/225>; sex: Female; catalogNumber: BMNHE1722106; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- d. scientificName: *Micropygomyia (Micropygomyia) cayennensis braci* (Lewis, 1967); country: Cayman Islands; stateProvince: Cayman Brac; locality: Bamboo Bay; eventDate: 12-18-64; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/226>; sex:

- Male; catalogNumber: BMNHE1722107; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- e. scientificName: *Micropygomyia (Micropygomyia) cayennensis braci* (Lewis, 1967); country: Cayman Islands; stateProvince: Cayman Brac; locality: Stake Bay; eventDate: 12-16-64; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/227>; sex: Male; catalogNumber: BMNHE1722108; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- f. scientificName: *Micropygomyia (Micropygomyia) cayennensis braci* (Lewis, 1967); country: Cayman Islands; stateProvince: Cayman Brac; locality: Stake Bay; eventDate: 12-16-64; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/228>; sex: Male; catalogNumber: BMNHE1722109; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- g. scientificName: *Micropygomyia (Micropygomyia) cayennensis braci* (Lewis, 1967); country: Cayman Islands; stateProvince: Cayman Brac; locality: Bamboo Bay; eventDate: 12-18-64; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/229>; sex: Female; catalogNumber: BMNHE1722110; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- h. scientificName: *Micropygomyia (Micropygomyia) cayennensis braci* (Lewis, 1967); country: Cayman Islands; stateProvince: Cayman Brac; locality: Bamboo Bay; eventDate: 12-18-64; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/230>; sex: Male; catalogNumber: BMNHE1722111; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- i. scientificName: *Micropygomyia (Micropygomyia) cayennensis braci* (Lewis, 1967); country: Cayman Islands; stateProvince: Cayman Brac; locality: Stake Bay; eventDate: 12-16-64; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/231>; sex: Female; catalogNumber: BMNHE1722112; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- j. scientificName: *Micropygomyia (Micropygomyia) cayennensis braci* (Lewis, 1967); country: Cayman Islands; stateProvince: Cayman Brac; locality: Bamboo Bay; eventDate: 12-18-64; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/232>; sex: Male; catalogNumber: BMNHE1722113; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Cayman Islands

**Notes:** Valid species in *Micropygomyia (Micropygomyia)*.

### ***cayennensis hispaniolae* Fairchild & Trapido, 1950**

#### **Nomenclature:**

*Phlebotomus cayennensis hispaniolae* Fairchild & Trapido, 1950 (Fairchild and Trapido 1950)

#### **Materials**

##### **Paratypes:**

- a. scientificName: *Micropygomyia (Micropygomyia) cayennensis hispaniolae* (Fairchild & Trapido, 1950); country: Haiti; stateProvince: Nord; locality: La Voute, 4.8 miles from Cap-Haïtien on Limbe Rd.; eventDate: 06-09-49; eventRemarks: <http://>

- [phlebotominaenhmtypes.myspecies.info/node/148](http://phlebotominaenhmtypes.myspecies.info/node/148); sex: Female; catalogNumber: BMNHE1722029; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Micropygomyia (Micropygomyia) cayennensis hispaniolae* (Fairchild & Trapido, 1950); country: Haiti; stateProvince: Nord; municipality: le Cap-Haïtien; locality: Milot, le Cap-Haïtien; eventDate: 06-09-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/149>; sex: Male; catalogNumber: BMNHE1722030; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Micropygomyia (Micropygomyia) cayennensis hispaniolae* (Fairchild & Trapido, 1950); country: Dominican Republic; stateProvince: Hato Mayor; municipality: Sabana de la Mar; locality: Cacao plantation 6 km South of Sabana de la Mar; eventDate: 06-12-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/150>; sex: Female; catalogNumber: BMNHE1722031; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- d. scientificName: *Micropygomyia (Micropygomyia) cayennensis hispaniolae* (Fairchild & Trapido, 1950); country: Haiti; stateProvince: Nord; municipality: le Cap-Haïtien; locality: Ruins of Pauline Bonaparte's palace East of town; eventDate: 06-09-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/151>; sex: Female; catalogNumber: BMNHE1722032; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- e. scientificName: *Micropygomyia (Micropygomyia) cayennensis hispaniolae* (Fairchild & Trapido, 1950); country: Haiti; stateProvince: Nord; municipality: le Cap-Haïtien; locality: Ruins of Pauline Bonaparte's palace East of town; eventDate: 06-09-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/152>; sex: Male; catalogNumber: BMNHE1722033; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- f. scientificName: *Micropygomyia (Micropygomyia) cayennensis hispaniolae* (Fairchild & Trapido, 1950); country: Dominican Republic; stateProvince: Santiago; locality: Santiago area; eventDate: 06-14-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/153>; sex: Male; catalogNumber: BMNHE1722034; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Dominican Republic, Haiti

**Notes:** Valid species in *Micropygomyia (Micropygomyia)*.

### ***cayennensis jamaicensis* Fairchild & Trapido, 1950**

**Nomenclature:**

*Phlebotomus cayennensis jamaicensis* Fairchild & Trapido, 1950 (Fairchild and Trapido 1950)

**Material**

**Paratype:**

- a. scientificName: *Micropygomyia (Micropygomyia) cayennensis jamaicensis* (Fairchild & Trapido, 1950); country: Jamaica; stateProvince: Kingston; locality: Rockfort, St Andrew parish, Kingston; eventDate: 05-20-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/156>; sex: Male; catalogNumber: BMNHE1722037; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Jamaica

**Notes:** Valid species in *Micropygomyia* (*Micropygomyia*).

### ***cayennensis maciasi* Fairchild & Hertig, 1948**

#### **Nomenclature:**

*Phlebotomus cayennensis maciasi* Fairchild & Hertig, 1948 (Fairchild and Hertig 1948)

#### **Materials**

##### *Paratypes:*

- a. scientificName: *Micropygomyia* (*Micropygomyia*) *cayennensis maciasi* (Fairchild & Hertig, 1948); country: Mexico; stateProvince: México; municipality: Zumpango; locality: Zumpango; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/154>; sex: Female; catalogNumber: BMNHE1722035; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Micropygomyia* (*Micropygomyia*) *cayennensis maciasi* (Fairchild & Hertig, 1948); country: Guatemala; stateProvince: Escuintla; municipality: San José; locality: San José; eventDate: 06-03-45; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/155>; sex: Female; catalogNumber: BMNHE1722036; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Belize, Guatemala, Mexico

**Notes:** Valid species in *Micropygomyia* (*Micropygomyia*).

### ***cayennensis puertoricensis* Fairchild & Hertig, 1948**

#### **Nomenclature:**

*Phlebotomus cayennensis puertoricensis* Fairchild & Hertig, 1948 (Fairchild and Hertig 1948)

#### **Material**

##### *Paratype:*

- a. scientificName: *Micropygomyia* (*Micropygomyia*) *cayennensis puertoricensis* (Fairchild & Hertig, 1948); country: Puerto Rico; stateProvince: Lares; locality: Lares; eventDate: 07-03-47; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/159>; sex: Female; catalogNumber: BMNHE1722040; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Puerto Rico

**Notes:** Valid species in *Micropygomyia* (*Micropygomyia*).

### ***coutinhoi* Mangabeira, 1942**

#### **Nomenclature:**

*Flebotomus coutinhoi* Mangabeira, 1942 (Mangabeira 1942)

## Material

### Paratype:

- a. scientificName: *Psathyromyia (Forattiniella) coutinhoi* (Mangabeira, 1942); country: Brazil; stateProvince: Pará; municipality: Belém; locality: Asura; year: 1940; month: 8; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/104>; sex: Male; catalogNumber: BMNHE1721985; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Bolivia, Brazil, Peru

**Notes:** Valid species in *Psathyromyia (Forattiniella)*.

## *cubensis* Fairchild & Trapido, 1950

### Nomenclature:

*Phlebotomus cubensis* Fairchild & Trapido, 1950 (Fairchild and Trapido 1950)

### Materials

#### Paratypes:

- a. scientificName: *Micropygomyia (Micropygomyia) cubensis* (Fairchild & Trapido, 1950); country: Cuba; stateProvince: Camagüey; locality: Camagüey; eventDate: 05-30-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/160>; sex: Female; catalogNumber: BMNHE1722041; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Micropygomyia (Micropygomyia) cubensis* (Fairchild & Trapido, 1950); country: Cuba; stateProvince: Pinar del Río; municipality: Viñales; locality: San Vicente, Viñales; eventDate: 06-04-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/161>; sex: Male; catalogNumber: BMNHE1722042; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Micropygomyia (Micropygomyia) cubensis* (Fairchild & Trapido, 1950); country: Cuba; stateProvince: Camagüey; locality: spelling on slide "Camaguay"; eventDate: 05-30-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/233>; sex: Female; catalogNumber: BMNHE1722114; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- d. scientificName: *Micropygomyia (Micropygomyia) cubensis* (Fairchild & Trapido, 1950); country: Cuba; stateProvince: Matanzas; locality: Ceiba Mocha; eventDate: 06-02-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/234>; catalogNumber: BMNHE1722115; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- e. scientificName: *Micropygomyia (Micropygomyia) cubensis* (Fairchild & Trapido, 1950); country: Cuba; stateProvince: Camagüey; locality: spelling on slide "Camaguay"; eventDate: 05-30-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/235>; sex: Male; catalogNumber: BMNHE1722116; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Cuba, United States of America

**Notes:** Valid species in *Micropygomyia (Micropygomyia)*.

**dasymera** Fairchild & Hertig, 1961**Nomenclature:**

*Phlebotomus dasymerus* Fairchild & Hertig, 1961 (Fairchild and Hertig 1961)

**Materials****Paratypes:**

- a. scientificName: *Psathyromyia (Psathyromyia) dasymera* (Fairchild & Hertig, 1961); country: Panama; stateProvince: Colón; locality: Juan Mina; eventDate: 11-29-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/93>; sex: Male; catalogNumber: BMNHE1251321; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Psathyromyia (Psathyromyia) dasymera* (Fairchild & Hertig, 1961); country: Panama; stateProvince: Panamá; locality: Río Majé, Charco el Toro; eventDate: 03-22-50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/94>; sex: Male; catalogNumber: BMNHE1251322; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Psathyromyia (Psathyromyia) dasymera* (Fairchild & Hertig, 1961); country: Panama; locality: Canal zone, Camp Piña; eventDate: 03-06-54; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/95>; sex: Female; catalogNumber: BMNHE1251323; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- d. scientificName: *Psathyromyia (Psathyromyia) dasymera* (Fairchild & Hertig, 1961); country: Panama; stateProvince: Colón; locality: Mojinga swamp; eventDate: 07-24-54; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/96>; sex: Female; catalogNumber: BMNHE1251324; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Belize, Brazil, Colombia, Costa Rica, Ecuador, Mexico, Nicaragua, Panama, Venezuela

**Notes:** Valid species in *Psathyromyia (Psathyromyia)*.

**del-pozoi** Vargas & Díaz-Nájera, 1953**Nomenclature:**

*Phlebotomus del-pozoi* Vargas & Díaz-Nájera, 1953 (Vargas and Díaz Nájera 1953)

**Materials****Paratypes:**

- a. scientificName: *Dampfomyia delpozoi* (Vargas & Díaz-Nájera, 1953); country: Mexico; stateProvince: Chiapas; locality: Finca El Vergel; eventDate: 05-28-35; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/261>; sex: Female; catalogNumber: BMNHE1722142; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Dampfomyia delpozoi* (Vargas & Díaz-Nájera, 1953); country: Mexico; stateProvince: Chiapas; locality: Finca El Vergel; eventDate: 05-28-35; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/262>; sex: Female; catalogNumber: BMNHE1722143; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Belize, Guatemala, Mexico

**Notes:** Valid species in *Dampfomyia*.

### ***duppyorum* Fairchild & Trapido, 1950**

**Nomenclature:**

*Phlebotomus duppyorum* Fairchild & Trapido, 1950 (Fairchild and Trapido 1950)

**Materials**

**Paratypes:**

- a. scientificName: *Micropygomyia (Micropygomyia) duppyorum* (Fairchild & Trapido, 1950); country: Jamaica; stateProvince: Manchester; locality: Melrose Hill, nr. Williams Field; eventDate: 05-25-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/189>; sex: Female; catalogNumber: BMNHE1722070; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Micropygomyia (Micropygomyia) duppyorum* (Fairchild & Trapido, 1950); country: Jamaica; stateProvince: Manchester; locality: Melrose Hill, nr. Williams Field; eventDate: 05-25-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/190>; sex: Male; catalogNumber: BMNHE1722071; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Micropygomyia (Micropygomyia) duppyorum* (Fairchild & Trapido, 1950); country: Jamaica; stateProvince: Manchester; locality: Melrose Hill, nr. Williams Field.; eventDate: 05-25-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/236>; sex: Female; catalogNumber: BMNHE1722117; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- d. scientificName: *Micropygomyia (Micropygomyia) duppyorum* (Fairchild & Trapido, 1950); country: Jamaica; stateProvince: Saint Catherine; locality: nr. Springvale; eventDate: 05-21-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/237>; sex: Male; catalogNumber: BMNHE1722118; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- e. scientificName: *Micropygomyia (Micropygomyia) duppyorum* (Fairchild & Trapido, 1950); country: Jamaica; stateProvince: Manchester; locality: Manchester area; eventDate: 05-25-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/238>; catalogNumber: BMNHE1722119; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Jamaica

**Notes:** Valid species in *Micropygomyia (Micropygomyia)*.

### ***dysponeta* Fairchild & Hertig, 1952**

**Nomenclature:**

*Phlebotomus dysponeta* Fairchild & Hertig, 1952 (Fairchild and Hertig 1952)



## Materials

### Paratypes:

- a. scientificName: *Pressatia dysponeta* (Fairchild & Hertig, 1952); country: Panama; stateProvince: Panamá; locality: Pacora; eventDate: 08-13-50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/194>; sex: Female; catalogNumber: BMNHE1722075; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Pressatia dysponeta* (Fairchild & Hertig, 1952); country: Panama; stateProvince: Panamá; locality: Pacora; eventDate: 08-13-50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/195>; sex: Male; catalogNumber: BMNHE1722076; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Brazil, Colombia, Costa Rica, Ecuador, Panama, Venezuela

**Notes:** Valid species in *Pressatia*.

## *evansi* Nuñez-Tovar, 1924

### Nomenclature:

*Phlebotomus evansi* Nuñez-Tovar, 1924 (Nuñez-Tovar 1924)

## Materials

### Syntypes:

- a. scientificName: *Pintomyia (Pifanomyia) evansi* (Nuñez-Tovar, 1924); country: Venezuela; year: 1922; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/208>; sex: Male; catalogNumber: BMNHE1722089; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Pintomyia (Pifanomyia) evansi* (Nuñez-Tovar, 1924); country: Venezuela; year: 1922; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/210>; sex: Male; catalogNumber: BMNHE1722091; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Colombia, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Peru, Venezuela

**Notes:** Valid species in *Pintomyia (Pifanomyia)*.

## *flochi* Abonnenc & Chassignet, 1948

### Nomenclature:

*Phlebotomus flochi* Abonnenc & Chassignet, 1948 (Abonnenc and Chassignet 1948)

## Material

### Holotype:

- a. scientificName: *Trichophoromyia flochi* (Abonnenc & Chassignet, 1948); country: French Guiana; locality: Baduel; year: 1947; month: 12; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/257>; sex: Male; catalogNumber: BMNHE1722138; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Brazil, French Guiana

**Notes:** Valid species in *Trichophoromyia*.

### ***gasti* Sherlock, 1962**

**Nomenclature:**

*Phlebotomus gastii* Sherlock, 1962 (Sherlock 1962)

**Materials**

**Paratypes:**

- a. scientificName: *Evandromyia (Aldamyia) gastii* (Sherlock, 1962); acceptedNameUsage: *Evandromyia (Aldamyia) walkeri* (Newstead, 1914); country: Colombia; stateProvince: Santander; municipality: San Vicente de Chucurí; locality: Soledad, San Vicente de Chucurí; eventDate: 08-16-74; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/215>; sex: Male; catalogNumber: BMNHE1722096; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Evandromyia (Aldamyia) gastii* (Sherlock, 1962); acceptedNameUsage: *Evandromyia (Aldamyia) walkeri* (Newstead, 1914); country: Colombia; stateProvince: Santander; municipality: San Vicente de Chucurí; locality: Soledad, San Vicente de Chucurí; eventDate: 16/08/44; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/216>; sex: Male; catalogNumber: BMNHE1722097; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Bolivia, Brazil, Colombia, Ecuador, French Guiana, Panama, Peru, Trinidad and Tobago, Venezuela

**Notes:** Synonym of *Evandromyia (Aldamyia) walkeri* (Newstead, 1914). Synonymised by Young 1979.

### ***gonzaloi* Ogusuku, Canales & Pérez, 1997**

**Nomenclature:**

*Lutzomyia gonzaloi* Ogusuku, Canales & Pérez, 1997 (Ogusuku et al. 1997)

**Materials**

**Paratypes:**

- a. scientificName: *Lutzomyia (Helcocyrtomyia) gonzaloi* Ogusuku, Canales & Pérez, 1997; country: Peru; stateProvince: Huánuco; municipality: Huamalíes; locality: Monzon, Paucacu; eventDate: 05-22-97; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/131>; sex: Male; catalogNumber: BMNHE1722012; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Lutzomyia (Helcocyrtomyia) gonzaloi* Ogusuku, Canales & Pérez, 1998; country: Peru; stateProvince: Huánuco; municipality: Huamalíes; locality: Monzon, Paucacu; eventDate: 05-22-97; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/132>; sex: Female; catalogNumber: BMNHE1722013; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Peru

**Notes:** Valid species in *Lutzomyia* (*Helcocyrtomyia*).

### ***hansoni* Fairchild & Hertig, 1961**

**Nomenclature:**

*Phlebotomus hansoni* Fairchild & Hertig, 1961 (Fairchild and Hertig 1961)

**Materials**

**Paratypes:**

- a. scientificName: *Migonemyia* (*Blancasmyia*) *hansoni* (Fairchild & Hertig, 1961); acceptedNameUsage: *Migonemyia* (*Blancasmyia*) *gorbitzi* (Blancas, 1960); country: Panama; stateProvince: Bocas del Toro; locality: Almirante; eventDate: 06-19-51; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/116>; sex: Female; catalogNumber: BMNHE1721997; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Migonemyia* (*Blancasmyia*) *hansoni* (Fairchild & Hertig, 1961); acceptedNameUsage: *Migonemyia* (*Blancasmyia*) *gorbitzi* (Blancas, 1960); country: Panama; stateProvince: Bocas del Toro; locality: Almirante; eventDate: 06-19-51; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/117>; sex: Female; catalogNumber: BMNHE1721998; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Colombia, Costa Rica, Ecuador, Panama, Peru

**Notes:** Synonym of *Migonemyia* (*Blancasmyia*) *gorbitzi* (Blancas, 1959) Blancas 1959. Synonymised by Christensen and Rutledge 1973.

### ***hartmanni* Fairchild & Hertig, 1957**

**Nomenclature:**

*Phlebotomus hartmanni* Fairchild & Hertig, 1957 (Fairchild and Hertig 1957)

**Materials**

**Paratypes:**

- a. scientificName: *Lutzomyia* (*Helcocyrtomyia*) *hartmanni* (Fairchild & Hertig, 1957); country: Panama; locality: Cerro Campana; eventDate: 04-24-52; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/126>; sex: Male; catalogNumber: BMNHE1722007; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Lutzomyia* (*Helcocyrtomyia*) *hartmanni* (Fairchild & Hertig, 1957); country: Panama; locality: Cerro Campana; eventDate: 02-10-51; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/127>; sex: Female; catalogNumber: BMNHE1722008; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Colombia, Costa Rica, Ecuador, Mexico, Panama, Peru

**Notes:** Valid species in *Lutzomyia* (*Helcocyrtomyia*).

***inpai* Young & Arias, 1977****Nomenclature:**

*Lutzomyia inpai* Young & Arias, 1977 (Young and Arias 1977)

**Materials****Paratypes:**

- a. scientificName: *Evandromyia (Evandromyia) inpai* (Young & Arias, 1977); country: Brazil; stateProvince: Amazonas State; locality: Manaus, Estrada Torquato Tapajos, km 54 (east of Manaus); eventDate: 10-21-75; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/113>; sex: Female; catalogNumber: BMNHE1721994; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Evandromyia (Evandromyia) inpai* (Young & Arias, 1977); country: Brazil; stateProvince: Amazonas State; locality: Manaus, Estrada Torquato Tapajos, km 54 (east of Manaus); eventDate: 10-21-75; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/114>; sex: Male; catalogNumber: BMNHE1721995; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Brazil, Venezuela

**Notes:** Valid species in *Evandromyia (Evandromyia)*.

***isovespertilionis* Fairchild & Hertig, 1958****Nomenclature:**

*Phlebotomus isovespertilionis* Fairchild & Hertig, 1958 (Fairchild and Hertig 1958a)

**Materials****Paratypes:**

- a. scientificName: *Dampfomyia (Coromyia) isovespertilionis* (Fairchild & Hertig, 1958); country: Panama; eventDate: 06-20-56; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/105>; sex: Male; catalogNumber: BMNHE1721986; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Dampfomyia (Coromyia) isovespertilionis* (Fairchild & Hertig, 1958); country: Panama; eventDate: 06-20-56; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/106>; sex: Male; catalogNumber: BMNHE1721987; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Dampfomyia (Coromyia) isovespertilionis* (Fairchild & Hertig, 1958); country: Panama; eventDate: 06-20-56; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/107>; sex: Male; catalogNumber: BMNHE1721988; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- d. scientificName: *Dampfomyia (Coromyia) isovespertilionis* (Fairchild & Hertig, 1958); country: Panama; eventDate: 06-20-56; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/108>; sex: Male; catalogNumber: BMNHE1721989; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- e. scientificName: *Dampfomyia (Coromyia) isovespertilionis* (Fairchild & Hertig, 1958); country: Panama; eventDate: 06-20-56; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/108>; sex: Male; catalogNumber: BMNHE1721989; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

- [phlebotominaenhmtypes.myspecies.info/node/109](http://phlebotominaenhmtypes.myspecies.info/node/109); sex: Male; catalogNumber: BMNHE1721990; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- f. scientificName: *Dampfomyia (Coromyia) isovespertillonis* (Fairchild & Hertig, 1958); country: Panama; locality: K-19; eventDate: 07-24-56; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/166>; sex: Male; catalogNumber: BMNHE1722047; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Colombia, Costa Rica, Panama

**Notes:** Valid species in *Dampfomyia (Coromyia)*.

### ***lainsoni* Fraiha & Ward, 1974**

#### **Nomenclature:**

*Psychodopygus lainsoni* Fraiha & Ward, 1974 (Fraiha and Ward 1974)

#### **Materials**

##### *Paratypes:*

- a. scientificName: *Psychodopygus lainsoni* (Fraiha & Ward, 1974); country: Brazil; stateProvince: Pará; locality: km 46 Altamira to Itaituba road, Transamazonia highway; eventDate: 08-21-71; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/196>; sex: Female; catalogNumber: BMNHE1722077; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Psychodopygus lainsoni* (Fraiha & Ward, 1974); country: Brazil; stateProvince: Pará; locality: km 46 Altamira to Itaituba road, Transamazonia highway; year: 1971; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/197>; sex: Male; catalogNumber: BMNHE1722078; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Psychodopygus lainsoni* (Fraiha & Ward, 1974); country: Brazil; stateProvince: Pará; locality: km 46 Altamira to Itaituba road, Transamazonia highway; eventDate: 08-21-71; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/198>; sex: Female; catalogNumber: BMNHE1722079; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- d. scientificName: *Psychodopygus lainsoni* (Fraiha & Ward, 1974); country: Brazil; stateProvince: Pará; locality: km 46 Altamira to Itaituba road, Transamazonia highway; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/199>; sex: Male; catalogNumber: BMNHE1722080; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Bolivia, Brazil, Peru

**Notes:** Valid species in *Psychodopygus*.

### ***lewisi* Feliciangeli, Ordoñez & Fernández, 1984**

#### **Nomenclature:**

*Lutzomyia lewisi* Feliciangeli, Ordoñez & Fernández, 1984 (Feliciangeli et al. 1984a)

**Material***Holotype:*

- a. scientificName: *Micropygomyia (Micropygomyia) lewisi* (Felicangeli, Ordoñez & Fernández, 1984); country: Venezuela; stateProvince: Cojedes; locality: La Váquira; eventDate: 06-20-77; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/103>; sex: Female; catalogNumber: BMNHE1721984; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Venezuela

**Notes:** Valid species in *Micropygomyia (Micropygomyia)*.

***lumberasi* Ogosuku, Perez, Davies & Villaseca, 1996****Nomenclature:**

*Warileya lumberasi* Ogosuku, Perez, Davies & Villaseca, 1996 (Ogusuku et al. 1996)

**Materials***Paratypes:*

- a. scientificName: *Warileya lumberasi* Ogosuku, Perez, Davies & Villaseca, 1996; country: Peru; stateProvince: Piura; municipality: Huancabamba; locality: El Higueron; eventDate: 02-21-93; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/99>; sex: Female; catalogNumber: BMNHE1721980; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Warileya lumberasi* Ogosuku, Perez, Davies & Villaseca, 1996; country: Peru; stateProvince: Piura; municipality: Huancabamba; locality: El Higueron; eventDate: 05-23-92; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/100>; sex: Male; catalogNumber: BMNHE1721981; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Peru

**Notes:** Valid species in *Warileya*.

***monzonensis* Ogosuku, Canales & Pérez, 1997****Nomenclature:**

*Lutzomyia monzonensis* Ogosuku, Canales & Pérez, 1997 (Ogusuku et al. 1997)

**Materials***Paratypes:*

- a. scientificName: *Lutzomyia (Helcocyrtomyia) monzonensis* Ogosuku, Canales & Pérez, 1997; country: Peru; stateProvince: Huánuco; municipality: Huamalíes; locality: Monzon, Paucacu; eventDate: 05-22-97; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/133>; sex: Female; catalogNumber: BMNHE1722014; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

- b. scientificName: *Lutzomyia (Helcocyrtomyia) monzonensis* Ogusuku, Canales & Pérez, 1998; country: Peru; stateProvince: Huánuco; municipality: Huamalíes; locality: Monzon, Paucacu; eventDate: 05-22-97; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/145>; sex: Male; catalogNumber: BMNHE1722026; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Peru

**Notes:** Valid species in *Lutzomyia (Helcocyrtomyia)*.

## **odax** Fairchild & Hertig, 1961

### **Nomenclature:**

*Phlebotomus odax* Fairchild & Hertig, 1961 (Fairchild and Hertig 1961)

### **Materials**

#### *Paratypes:*

- a. scientificName: *Pintomyia (Pifanomyia) odax* (Fairchild & Hertig, 1961); country: Honduras; stateProvince: Atlántida; municipality: Tela; locality: Lancetilla Valley, Tela; eventDate: 06/01/54; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/171>; sex: Female; catalogNumber: BMNHE1722052; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Pintomyia (Pifanomyia) odax* (Fairchild & Hertig, 1961); country: Panama; stateProvince: Bocas del Toro; locality: Finca Nievécita, Almirante; eventDate: 17/06/50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/173>; sex: Male; catalogNumber: BMNHE1722054; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Pintomyia (Pifanomyia) odax* (Fairchild & Hertig, 1961); country: Honduras; stateProvince: Atlántida; municipality: Tela; locality: Lancetilla Valley, Tela; eventDate: 23/12/53; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/174>; sex: Female; catalogNumber: BMNHE1722055; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Brazil, Costa Rica, French Guiana, Guatemala, Honduras, Nicaragua, Panama, Venezuela

**Notes:** Valid species in *Pintomyia (Pifanomyia)*.

## **oligodonta** Young, Pérez & Romero, 1985

### **Nomenclature:**

*Lutzomyia oligodonta* Young, Pérez & Romero, 1985 (Young et al. 1985)

### **Material**

#### *Paratype:*

- a. scientificName: *Oligodontomyia oligodonta* (Young, Pérez & Romero, 1985); country: Peru; stateProvince: Lima; locality: Cocachacra; eventDate: 01/05/63; eventRemarks: [htt](http://phlebotominaenhmtypes.myspecies.info/node/175)

[p://phlebotominaenhmtypes.myspecies.info/node/217](http://phlebotominaenhmtypes.myspecies.info/node/217); sex: Male; catalogNumber: BMNHE1722098; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Peru

**Notes:** Valid species in *Oligodontomyia*.

### ***olmeca novica* Young & Arias, 1982**

#### **Nomenclature:**

*Lutzomyia olmeca novica* Young & Arias, 1982 (Young and Arias 1982)

#### **Materials**

##### *Paratypes:*

- a. scientificName: *Bichromomyia olmeca novica* (Young & Arias, 1982); country: Brazil; stateProvince: Amazonas; locality: 43km NE Manaus, at Campinas; eventDate: 03-21-79; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/185>; sex: Female; catalogNumber: BMNHE1722066; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Bichromomyia olmeca novica* (Young & Arias, 1982); country: Brazil; stateProvince: Amazonas; locality: 25km E of Manaus, Ducke Reserve; eventDate: 16-19/03/1979; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/186>; sex: Male; catalogNumber: BMNHE1722067; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Brazil, Peru

**Notes:** Valid species in *Bichromomyia*.

### ***olmeca olmeca* Vargas & Díaz-Nájera, 1959**

#### **Nomenclature:**

*Phlebotomus olmecus* Vargas & Díaz-Nájera, 1959 (Vargas and Díaz Nájera 1959)

#### **Material**

##### *Allotype:*

- a. scientificName: *Bichromomyia olmeca olmeca* (Vargas & Díaz-Nájera, 1959); country: Mexico; stateProvince: Tabasco; municipality: Teapa; locality: Sta A-0; eventDate: 12-16-53; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/91>; sex: Female; catalogNumber: BMNHE1251319; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Belize, Costa Rica, Guatemala, Honduras, Mexico, Nicaragua

**Notes:** Valid species in *Bichromomyia*.



**oresbia (Fairchild & Hertig, 1961)****Nomenclature:**

*Phlebotomus oresbia* Fairchild & Hertig, 1961 (Fairchild and Hertig 1961)

**Material****Paratype:**

- a. scientificName: *Pintomyia (Pifanomyia) oresbia* (Fairchild & Hertig, 1961); country: Panama; stateProvince: Chiriquí; municipality: Renacimiento; locality: Rio Candela, Chiriquí; eventDate: 11/08/51; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/172>; sex: Female; catalogNumber: BMNHE1722053; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Costa Rica, Panama

**Notes:** Valid species in *Pintomyia (Pifanomyia)*.

**peruensis Shannon, 1929****Nomenclature:**

*Phlebotomus peruensis* Shannon, 1929 (Shannon 1929)

**Material****Syntype:**

- a. scientificName: *Lutzomyia (Helcocyrtomyia) peruensis* (Shannon, 1929); country: Peru; stateProvince: Lima; locality: Matucana; eventDate: 06-19-28; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/258>; sex: Male; catalogNumber: BMNHE1722139; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Bolivia, Peru

**Notes:** Valid species in *Lutzomyia (Helcocyrtomyia)*.

**phlebotomanica Hertig, 1948****Nomenclature:**

*Warileya phlebotomanica* Hertig, 1948 (Hertig 1948)

**Materials****Paratypes:**

- a. scientificName: *Warileya phlebotomanica* Hertig, 1948; country: Peru; stateProvince: Lima; municipality: Huarochiri; locality: Acequia cueva, Matucana; eventDate: 08-25-45; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/163>; sex: Female; catalogNumber: BMNHE1722044; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Warileya phlebotomanica* Hertig, 1949; country: Peru; stateProvince: Lima; municipality: Huarochiri; locality: Rio Rimac, Matucana; month: 8; day: 23;

eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/164>; sex: Female; catalogNumber: BMNHE1722045; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Ecuador, Peru

**Notes:** Valid species in *Warileya*.

### ***pia* Fairchild & Hertig, 1961**

#### **Nomenclature:**

*Phlebotomus pius* Fairchild & Hertig, 1961 (Fairchild and Hertig 1961)

#### **Materials**

##### *Paratypes:*

- a. scientificName: *Pintomyia (Pifanomyia) pia* (Fairchild & Hertig, 1961); country: Panama; stateProvince: Chiriqui; locality: Lagunas del Volcán; eventDate: 05-19-50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/222>; sex: Male; catalogNumber: BMNHE1722103; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Pintomyia (Pifanomyia) pia* (Fairchild & Hertig, 1961); country: Panama; stateProvince: Chiriqui; locality: Sta. Clara, El Volcan; eventDate: 08-11-50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/223>; sex: Male; catalogNumber: BMNHE1722104; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Bolivia, Colombia, Costa Rica, Panama, Peru, Venezuela

**Notes:** Valid species in *Pintomyia (Pifanomyia)*.

### ***pinottii* Damasceno & Arouck, 1956**

#### **Nomenclature:**

*Flebotomus pinottii* Damasceno & Arouck, 1956 (Damasceno and Arouck 1956)

#### **Material**

##### *Paratype:*

- a. scientificName: *Evandromyia (Evandromyia) pinottii* (Damasceno & Arouck, 1956); country: Brazil; locality: Rio Acará; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/115>; sex: Male; catalogNumber: BMNHE1721996; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Brazil, French Guiana, Venezuela

**Notes:** Valid species in *Evandromyia (Evandromyia)*.

**quasitownsendi** Osorno, Osorno-Mesa & Morales, 1972**Nomenclature:**

*Lutzomyia quasitownsendi* Osorno, Osorno-Mesa & Morales, 1972 (Osorno et al. 1972)

**Materials****Paratypes:**

- a. scientificName: *Pintomyia (Pifanomyia) quasitownsendi* (Osorno, Osorno-Mesa & Morales, 1972); country: Colombia; stateProvince: Santander; municipality: Socorro; eventDate: 12-09-67; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/211>; sex: Male; catalogNumber: BMNHE1722092; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Pintomyia (Pifanomyia) quasitownsendi* (Osorno, Osorno-Mesa & Morales, 1972); country: Colombia; stateProvince: Santander; municipality: Barbosa; eventDate: 10-30-68; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/212>; sex: Female; catalogNumber: BMNHE1722093; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Pintomyia (Pifanomyia) quasitownsendi* (Osorno, Osorno-Mesa & Morales, 1972); country: Colombia; stateProvince: Santander; municipality: Barbosa; eventDate: 10-30-68; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/248>; sex: Female; catalogNumber: BMNHE1722129; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- d. scientificName: *Pintomyia (Pifanomyia) quasitownsendi* (Osorno, Osorno-Mesa & Morales, 1972); country: Colombia; stateProvince: Santander; municipality: Güepsa; eventDate: 06-22-67; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/249>; sex: Female; catalogNumber: BMNHE1722130; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Colombia

**Notes:** Valid species in *Pintomyia (Pifanomyia)*.

**richardwardi** Ready & Fraiha, 1981**Nomenclature:**

*Lutzomyia richardwardi* Ready & Fraiha, 1981 (Ready and Fraiha 1981)

**Materials****Paratypes:**

- a. scientificName: *Nyssomyia richardwardi* (Ready & Fraiha, 1981); country: Brazil; stateProvince: Pará; locality: Altamira-Itaituba rd km 43; eventDate: 08-21-71; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/92>; sex: Female; catalogNumber: BMNHE1251320; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Nyssomyia richardwardi* (Ready & Fraiha, 1981); country: Brazil; stateProvince: Pará; locality: km 43 Altamira to Itaituba rd; eventDate: 08-21-71; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/182>; sex: Female;

catalogNumber: BMNHE1722063; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

- c. scientificName: *Nyssomyia richardwardi* (Ready & Fraiha, 1981); country: Brazil; stateProvince: Pará; locality: km 43 Altamira to Itaituba rd; eventDate: 08-21-71; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/183>; sex: Female; catalogNumber: BMNHE1722064; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Bolivia, Brazil, Colombia, Ecuador, Peru

**Notes:** Valid species in *Nyssomyia*.

### ***rosabali* Fairchild & Hertig, 1956**

#### **Nomenclature:**

*Phlebotomus rosabali* Fairchild & Hertig, 1956 (Fairchild and Hertig 1956)

#### **Materials**

##### *Paratypes:*

- a. scientificName: *Dampfomyia (Dampfomyia) rosabali* (Fairchild & Hertig, 1956); country: Costa Rica; stateProvince: Puntarenas; locality: Barranca, Finca Socorrito; eventDate: 12-17-51; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/110>; sex: Female; catalogNumber: BMNHE1721991; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Dampfomyia (Dampfomyia) rosabali* (Fairchild & Hertig, 1956); country: Colombia; stateProvince: Cauca; municipality: Bolívar; locality: Bolívar (Cauca); eventDate: 23/01/44; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/167>; sex: Male; catalogNumber: BMNHE1722048; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Colombia, Costa Rica, Panama

**Notes:** Valid species in *Dampfomyia (Dampfomyia)*.

### ***rostrans* Summers, 1912**

#### **Nomenclature:**

*Phlebotomus rostrans* Summers, 1912 (Summers 1912)

#### **Materials**

##### *Paralectotypes:*

- a. scientificName: *Trichophoromyia rostrans* (Summers, 1912); locality: Rio Javari, Peru/ Brazil border; year: 1912; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/201>; sex: Male; catalogNumber: BMNHE1722082; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Trichophoromyia rostrans* (Summers, 1912); locality: Rio Javari, Peru/ Brazil border; year: 1912; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/>

[node/202](#); sex: Female; catalogNumber: BMNHE1722083; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

- c. scientificName: *Trichophoromyia rostrans* (Summers, 1912); locality: Rio Javari, Peru/ Brazil border; year: 1912; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/243>; sex: Female; catalogNumber: BMNHE1722124; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Lectotype:**

- a. scientificName: *Trichophoromyia rostrans* (Summers, 1912); locality: Rio Javari, Peru/ Brazil border; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/244>; sex: Female; catalogNumber: BMNHE1722125; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Brazil

**Notes:** Valid species in *Trichophoromyia*. Lectotype designated by Lewis 1967b.

***rotundipennis* Fairchild & Hertig, 1951**

**Nomenclature:**

*Warileya rotundipennis* Fairchild & Hertig, 1951 (Fairchild and Hertig 1951b)

**Materials**

**Paratypes:**

- a. scientificName: *Warileya rotundipennis* Fairchild & Hertig, 1951; country: Panama; locality: Cerro Campana; eventDate: 08-24-50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/101>; sex: Female; catalogNumber: BMNHE1721982; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Warileya rotundipennis* Fairchild & Hertig, 1951; country: Panama; locality: Cerro Campana; eventDate: 08-24-50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/102>; sex: Male; catalogNumber: BMNHE1721983; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Warileya rotundipennis* Fairchild & Hertig, 1953; country: Panama; locality: Cerro Campana; eventDate: 08-24-50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/165>; sex: Female; catalogNumber: BMNHE1722046; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Bolivia, Colombia, Costa Rica, Panama, Peru

**Notes:** Valid species in *Warileya*.

***sallei* Galvão & Coutinho, 1939**

**Nomenclature:**

*Flebotomus sallesi* Galvão & Coutinho, 1939 (Galvão and Coutinho 1939)

**Material***Paratype:*

- a. scientificName: *Evandromyia (Barrettomyia) sallesi* (Galvão & Coutinho, 1939); country: Brazil; stateProvince: São Paulo; municipality: Araçatuba; year: 1935; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/188>; sex: Female; catalogNumber: BMNHE1722069; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Argentina, Bolivia, Brazil, Ecuador, Paraguay, Peru

**Notes:** Valid species in *Evandromyia (Barrettomyia)*.

**scorzai Ortiz, 1965****Nomenclature:**

*Phlebotomus scorzai* Ortiz, 1965 (Ortíz 1965)

**Material***Paratype:*

- a. scientificName: *Lutzomyia (Helcocyrtomyia) scorzai* (Ortiz, 1965); country: Venezuela; locality: Rancho Grande; year: 1965; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/191>; sex: Male; catalogNumber: BMNHE1722072; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Colombia, Peru, Venezuela

**Notes:** Valid species in *Lutzomyia (Helcocyrtomyia)*.

**shawi Fraiha, Ward & Ready, 1981****Nomenclature:**

*Lutzomyia shawi* Fraiha, Ward & Ready, 1981 (Fraiha et al. 1981)

**Materials***Paratypes:*

- a. scientificName: *Nyssomyia shawi* (Fraiha, Ward & Ready, 1981); country: Brazil; stateProvince: Pará; municipality: Marabá; locality: Serra dos Carajás; year: 1975; month: 2; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/88>; sex: Male; catalogNumber: BMNHE1251316; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Nyssomyia shawi* (Fraiha, Ward & Ready, 1981); country: Brazil; stateProvince: Pará; municipality: Marabá; locality: Serra dos Carajás; eventDate: 09-22-74; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/89>; sex: Female; catalogNumber: BMNHE1251317; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Nyssomyia shawi* (Fraiha, Ward & Ready, 1981); country: Brazil; stateProvince: Pará; municipality: Marabá; locality: Serra dos Carajás; year: 1975; month: 2; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/180>; sex: Male;

catalogNumber: BMNHE1722061; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

- d. scientificName: *Nyssomyia shawi* (Fraiha, Ward & Ready, 1981); country: Brazil; stateProvince: Pará; municipality: Marabá; locality: Serra dos Carajás; eventDate: 09-23-74; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/181>; sex: Female; catalogNumber: BMNHE1722062; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- e. scientificName: *Nyssomyia shawi* (Fraiha, Ward & Ready, 1981); country: Brazil; stateProvince: Pará; municipality: Marabá; locality: Serra dos Carajás; eventDate: 09-23-74; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/184>; sex: Female; catalogNumber: BMNHE1722065; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Bolivia, Brazil, Colombia, Peru

**Notes:** Valid species in *Nyssomyia*.

### ***spinicrassa* Morales, Osorno-Mesa, Osorno & Hoyos, 1969**

#### **Nomenclature:**

*Lutzomyia spinicrassa* Morales, Osorno-Mesa, Osorno & Hoyos, 1969 (Morales et al. 1969)

#### **Materials**

##### *Paratypes:*

- a. scientificName: *Pintomyia (Pifanomyia) spinicrassa* (Morales, Osorno-Mesa, Osorno & Hoyos, 1969); country: Colombia; stateProvince: Boyacá; locality: Guayatá - Chitavita; eventDate: 08-09-68; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/213>; sex: Female; catalogNumber: BMNHE1722094; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Pintomyia (Pifanomyia) spinicrassa* (Morales, Osorno-Mesa, Osorno & Hoyos, 1969); country: Colombia; stateProvince: Boyacá; locality: Guayatá - Chitavita; eventDate: 08-09-68; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/214>; sex: Male; catalogNumber: BMNHE1722095; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Pintomyia (Pifanomyia) spinicrassa* (Morales, Osorno-Mesa, Osorno & Hoyos, 1969); country: Colombia; stateProvince: Boyacá; locality: Guayatá - Chitavita; eventDate: 08-09-68; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/250>; sex: Female; catalogNumber: BMNHE1722131; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- d. scientificName: *Pintomyia (Pifanomyia) spinicrassa* (Morales, Osorno-Mesa, Osorno & Hoyos, 1969); country: Colombia; stateProvince: Boyacá; locality: Guayatá - Chitavita; eventDate: 08-09-68; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/251>; sex: Female; catalogNumber: BMNHE1722132; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Colombia, Venezuela

**Notes:** Valid species in *Pintomyia (Pifanomyia)*.

***strictivilla* Young, 1979****Nomenclature:**

*Lutzomyia strictivilla* Young, 1979 (Young 1979)

**Material****Paratype:**

- a. scientificName: *Lutzomyia (Helcocyrtomyia) strictivilla* Young, 1979; country: Colombia; stateProvince: Antioquia; municipality: Zaragoza; locality: 24km SW of Zaragoza at Rio Anori; eventDate: 04-14-71; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/128>; sex: Male; catalogNumber: BMNHE1722009; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Colombia, Ecuador, Venezuela

**Notes:** Valid species in *Lutzomyia (Helcocyrtomyia)*.

***trapidoi* Fairchild & Hertig, 1952****Nomenclature:**

*Phlebotomus trapidoi* Fairchild & Hertig, 1952 (Fairchild and Hertig 1952)

**Materials****Paratypes:**

- a. scientificName: *Nyssomyia trapidoi* (Fairchild & Hertig, 1952); country: Panama; stateProvince: Bocas del Toro; locality: Almirante, Finca Nievécita; eventDate: 06-21-50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/86>; sex: Male; catalogNumber: BMNHE1251314; institutionCode: NHMUK
- b. scientificName: *Nyssomyia trapidoi* (Fairchild & Hertig, 1952); country: Panama; stateProvince: Bocas del Toro; locality: Almirante; eventDate: 22/07/50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/179>; catalogNumber: BMNHE1722060; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Nicaragua, Panama

**Notes:** Valid species in *Nyssomyia*.

***trinidadensis* Newstead, 1922****Nomenclature:**

*Phlebotomus trinidadensis* Newstead, 1922 (Newstead 1922)

**Materials****Syntypes:**

- a. scientificName: *Micropygomyia (Sauromyia) trinidadensis* (Newstead, 1922); country: Trinidad and Tabago; eventDate: 01-07-22; eventRemarks: <http://>



- [phlebotominaenhmtypes.myspecies.info/node/118](http://phlebotominaenhmtypes.myspecies.info/node/118); sex: Male; catalogNumber: BMNHE1721999; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Micropygomyia (Sauromyia) trinidadensis* (Newstead, 1922); country: Trinidad and Tabago; eventDate: 01-07-22; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/119>; sex: Female; catalogNumber: BMNHE1722000; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Micropygomyia (Sauromyia) trinidadensis* (Newstead, 1922); country: Trinidad and Tabago; eventDate: 01-07-22; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/120>; sex: Female; catalogNumber: BMNHE1722001; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- d. scientificName: *Micropygomyia (Sauromyia) trinidadensis* (Newstead, 1922); country: Trinidad and Tabago; eventDate: 01-07-22; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/121>; sex: Male; catalogNumber: BMNHE1722002; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- e. scientificName: *Micropygomyia (Sauromyia) trinidadensis* (Newstead, 1922); country: Trinidad and Tabago; eventDate: 01-07-22; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/122>; sex: Male; catalogNumber: BMNHE1722003; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- f. scientificName: *Micropygomyia (Sauromyia) trinidadensis* (Newstead, 1922); country: Trinidad and Tabago; eventDate: 01-07-22; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/123>; sex: Female; catalogNumber: BMNHE1722004; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- g. scientificName: *Micropygomyia (Sauromyia) trinidadensis* (Newstead, 1922); country: Trinidad and Tabago; eventDate: 01-07-22; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/124>; sex: Female; catalogNumber: BMNHE1722005; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- h. scientificName: *Micropygomyia (Sauromyia) trinidadensis* (Newstead, 1922); country: Trinidad and Tabago; eventDate: 01-07-22; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/125>; sex: Female; catalogNumber: BMNHE1722006; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, French Guiana, Guatemala, Honduras, Mexico, Nicaragua, Peru, Panama, Surinam, Trinidad and Tobago, Venezuela

**Notes:** Valid species in *Micropygomyia (Sauromyia)*.

## ***triramula* Fairchild & Hertig, 1952**

### **Nomenclature:**

*Phlebotomus triramulus* Fairchild & Hertig, 1952 (Fairchild and Hertig 1952)

### **Materials**

#### *Paratypes:*

- a. scientificName: *Trichopygomyia triramula* (Fairchild & Hertig, 1952); country: Panama; stateProvince: Panamá; locality: Cerro Jefe, La Victoria; eventDate: 08-29-50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/205>; sex: Female; catalogNumber: BMNHE1722086; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

- b. scientificName: *Trichopygomyia triramula* (Fairchild & Hertig, 1952); country: Panama; stateProvince: Colón; locality: Palenque; eventDate: 09-15-49; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/206>; sex: Male; catalogNumber: BMNHE1722087; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Belize, Colombia, Costa Rica, Ecuador, Guatemala, Mexico, Panama

**Notes:** Valid species in *Trichopygomyia*.

## ***ubiquitalis* Mangabeira, 1942**

### **Nomenclature:**

*Flebotomus ubiquitalis* Mangabeira, 1942 (Mangabeira 1942)

### **Materials**

#### **Syntypes:**

- a. scientificName: *Trichophoromyia ubiquitalis* (Mangabeira, 1942); country: Brazil; stateProvince: Pará; municipality: Belém; locality: Aura; eventDate: 10-08-40; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/203>; sex: Male; catalogNumber: BMNHE1722084; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Trichophoromyia ubiquitalis* (Mangabeira, 1942); country: Brazil; stateProvince: Pará; municipality: Belém; locality: Aura; eventDate: 10-08-40; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/204>; sex: Male; catalogNumber: BMNHE1722085; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Trichophoromyia ubiquitalis* (Mangabeira, 1942); country: Brazil; stateProvince: Pará; municipality: Belém; locality: Aura; eventDate: 10-08-40; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/245>; sex: Male; catalogNumber: BMNHE1722126; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- d. scientificName: *Trichophoromyia ubiquitalis* (Mangabeira, 1942); country: Brazil; stateProvince: Pará; municipality: Belém; locality: Aura; eventDate: 10-08-40; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/246>; sex: Male; catalogNumber: BMNHE1722127; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- e. scientificName: *Trichophoromyia ubiquitalis* (Mangabeira, 1942); country: Brazil; stateProvince: Pará; municipality: Belém; locality: Aura; eventDate: 10-08-40; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/247>; sex: Male; catalogNumber: BMNHE1722128; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- f. scientificName: *Trichophoromyia ubiquitalis* (Mangabeira, 1942); country: Brazil; stateProvince: Pará; municipality: Belém; locality: Aura; eventDate: 10-08-40; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/259>; sex: Male; catalogNumber: BMNHE1722140; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Bolivia, Brazil, Colombia, Ecuador, French Guiana, Peru, Surinam, Venezuela

**Notes:** Valid species in *Trichophoromyia*.

### ***umbratilis* Ward & Fraiha, 1977**

**Nomenclature:**

*Lutzomyia umbratilis* Ward & Fraiha, 1977 (Ward and Fraiha 1977)

**Materials**

*Paratypes:*

- a. scientificName: *Nyssomyia umbratilis* (Ward & Fraiha, 1977); country: Brazil; stateProvince: Pará; locality: Rio Jari, Monte Dourado; eventDate: 06/02/76; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/177>; sex: Female; catalogNumber: BMNHE1722058; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Nyssomyia umbratilis* (Ward & Fraiha, 1977); country: Brazil; stateProvince: Pará; locality: Rio Jari, Monte Dourado; eventDate: 12/11/76; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/178>; sex: Female; catalogNumber: BMNHE1722059; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Bolivia, Brazil, Colombia, French Guiana, Peru, Surinam, Venezuela

**Notes:** Valid species in *Nyssomyia*.

### ***vexillarius* Fairchild & Hertig, 1952**

**Nomenclature:**

*Phlebotomus vexillarius* Fairchild & Hertig, 1952 (Fairchild and Hertig 1952)

**Material**

*Paratype:*

- a. scientificName: *Lutzomyia (Lutzomyia) vexillarius* (Fairchild & Hertig, 1952); acceptedNameUsage: *Lutzomyia (Lutzomyia) lichi* (Floch & Abonnenc, 1950); country: Panama; stateProvince: Panamá; locality: Serrania majé, Cerro Chucanti; eventDate: 03-05-50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/146>; sex: Male; catalogNumber: BMNHE1722027; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Brazil, Colombia, Costa Rica, Ecuador, French Guiana, Panama, Peru, Trinidad and Tobago, Venezuela

**Notes:** Synonym of *Lutzomyia (Lutzomyia) lichi* (Floch & Abonnenc, 1950) Floch and Abonnenc 1950. Synonymised by Floch and Kramer 1965.

***viriosa* Fairchild & Hertig, 1958****Nomenclature:**

*Phlebotomus viriosa* Fairchild & Hertig, 1958 (Fairchild and Hertig 1958a)

**Materials****Paratypes:**

- a. scientificName: *Dampfomyia (Coromyia) viriosa* (Fairchild & Hertig, 1958); country: Panama; stateProvince: Bocas del Toro; locality: near camp No.1, Almirante; eventDate: 05-17-51; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/139>; sex: Female; catalogNumber: BMNHE1722020; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Dampfomyia (Coromyia) viriosa* (Fairchild & Hertig, 1958); country: Panama; stateProvince: Bocas del Toro; locality: Almirante; eventDate: 03-24-52; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/140>; sex: Male; catalogNumber: BMNHE1722021; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Dampfomyia (Coromyia) viriosa* (Fairchild & Hertig, 1958); country: Panama; stateProvince: Bocas del Toro; locality: Almirante; eventDate: 09-17-52; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/141>; sex: Female; catalogNumber: BMNHE1722022; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- d. scientificName: *Dampfomyia (Coromyia) viriosa* (Fairchild & Hertig, 1958); country: Panama; stateProvince: Bocas del Toro; locality: near camp No.1, Almirante; eventDate: 05-17-51; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/142>; sex: Male; catalogNumber: BMNHE1722023; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- e. scientificName: *Dampfomyia (Coromyia) viriosa* (Fairchild & Hertig, 1958); country: Panama; stateProvince: Bocas del Toro; locality: Almirante; eventDate: 09-09-52; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/143>; sex: Female; catalogNumber: BMNHE1722024; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- f. scientificName: *Dampfomyia (Coromyia) viriosa* (Fairchild & Hertig, 1958); country: Panama; stateProvince: Bocas del Toro; locality: near camp No.1, Almirante; eventDate: 05-17-51; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/144>; sex: Male; catalogNumber: BMNHE1722025; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Costa Rica, Panama

**Notes:** Valid species in *Dampfomyia (Coromyia)*.

***walkeri* Newstead, 1914****Nomenclature:**

*Phlebotomus walkeri* Newstead 1914 (Newstead 1914)

*Phlebotomus gasti* Sherlock, 1962

## Materials

### Lectotype:

- a. scientificName: *Evandromyia (Aldamyia) walkeri* (Newstead, 1914); locality: Rio Abuna, Brazil/Boliva border; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/218>; sex: Male; catalogNumber: BMNHE1722099; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

### Paralectotypes:

- a. scientificName: *Evandromyia (Aldamyia) walkeri* (Newstead, 1914); locality: Rio Abuna, Brazil/Boliva border; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/219>; sex: Male; catalogNumber: BMNHE1722100; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Evandromyia (Aldamyia) walkeri* (Newstead, 1914); locality: Rio Abuna, Brazil/Boliva border; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/220>; sex: Female; catalogNumber: BMNHE1722101; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- c. scientificName: *Evandromyia (Aldamyia) walkeri* (Newstead, 1914); locality: Rio Abuna, Brazil/Boliva border; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/221>; sex: Female; catalogNumber: BMNHE1722102; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- d. scientificName: *Evandromyia (Aldamyia) walkeri* (Newstead, 1914); country: Brazil; stateProvince: State of Rondonia; locality: Rio Abuna, Brazil/Boliva border; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/252>; sex: Male; catalogNumber: BMNHE1722133; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- e. scientificName: *Evandromyia (Aldamyia) walkeri* (Newstead, 1914); country: Brazil; stateProvince: State of Rondonia; locality: Rio Abuna, Brazil/Boliva border; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/254>; sex: Male; catalogNumber: BMNHE1722135; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- f. scientificName: *Evandromyia (Aldamyia) walkeri* (Newstead, 1914); country: Brazil; stateProvince: State of Rondonia; locality: Rio Abuna, Brazil/Boliva border; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/255>; sex: Male; catalogNumber: BMNHE1722136; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- g. scientificName: *Evandromyia (Aldamyia) walkeri* (Newstead, 1914); country: Brazil; stateProvince: State of Rondonia; locality: Rio Abuna, Brazil/Boliva border; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/256>; sex: Male; catalogNumber: BMNHE1722137; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Bolivia, Brazil, Colombia, Ecuador, French Guiana, Panama, Peru, Trinidad and Tobago, Venezuela

**Notes:** Valid species in *Evandromyia (Aldamyia)*. Lectotype designated by Lewis 1967b.

***xerophila* Young, Brener & Wargo, 1983****Nomenclature:**

*Lutzomyia xerophila* Young, Brener & Wargo, 1983 (Young et al. 1983)

**Material****Paratype:**

- a. scientificName: *Pintomyia xerophila* (Young, Brener & Wargo, 1983); country: USA; stateProvince: California; municipality: Riverside; locality: Cahuilla Hills, Palm desert; eventDate: 09-16-81; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/224>; sex: Female; catalogNumber: BMNHE1722105; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** United States of America

**Notes:** Valid species in *Pintomyia* (*incertae sedis*).

***ylephiletor* Fairchild & Hertig, 1952****Nomenclature:**

*Phlebotomus ylephiletor* Fairchild & Hertig, 1952 (Fairchild and Hertig 1952)

**Materials****Paratypes:**

- a. scientificName: *Nyssomyia ylephiletor* (Fairchild & Hertig, 1952); country: Panama; stateProvince: Bocas del Toro; locality: Almirante, Finca Nievecita; eventDate: 06-22-50; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/87>; sex: Male; catalogNumber: BMNHE1251315; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Nyssomyia ylephiletor* (Fairchild & Hertig, 1952); country: Panama; stateProvince: Bocas del Toro; locality: Almirante; eventDate: 06-29-51; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/90>; sex: Female; catalogNumber: BMNHE1251318; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Belize, Colombia, Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama

**Notes:** Valid species in *Nyssomyia*.

***yuilli* Young & Porter, 1972****Nomenclature:**

*Lutzomyia yuilli* Young & Porter, 1972 (Young and Porter 1972)

## Materials

### Paratypes:

- a. scientificName: *Nyssomyia yuilli* (Young & Porter, 1972); country: Colombia; stateProvince: Antioquia; municipality: Zaragoza; locality: 24km S & 21 km W of Zaragoza; eventDate: 23/05/70; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/175>; sex: Male; catalogNumber: BMNHE1722056; institutionCode: NHMUK; basisOfRecord: Preserved Specimen
- b. scientificName: *Nyssomyia yuilli* (Young & Porter, 1972); country: Colombia; stateProvince: Antioquia; municipality: Zaragoza; locality: 24km S & 21 km W of Zaragoza; eventDate: 12/09/70; eventRemarks: <http://phlebotominaenhmtypes.myspecies.info/node/176>; sex: Female; catalogNumber: BMNHE1722057; institutionCode: NHMUK; basisOfRecord: Preserved Specimen

**Distribution:** Bolivia, Brazil, Colombia, Ecuador, Peru, Venezuela

**Notes:** Valid species in *Nyssomyia*.

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## Author contributions

PHFS: inspected type material, imaged specimens and assisted in manuscript writing. ZJOA: compiled data, created website, verified records and wrote manuscript.

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